

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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63
64 100 **MISSION STATEMENT**
65

66 Natural resources, such as those provided by the County Forest, are the base for
67 addressing the ecological and socioeconomic needs of society. The mission of the
68 County Forest is to manage, conserve, and protect these resources on a sustainable basis
69 for present and future generations.
70

71 County Forest resources should be protected from natural catastrophes such as fire, insect
72 and disease outbreaks, and from human threats such as encroachment, over-utilization,
73 environmental degradation and excessive development. While managed for
74 environmental needs including watershed protection, protection of rare plant and animal
75 communities, and maintenance of plant and animal diversity, these same resources must
76 also be managed and provide for sociological needs, including provisions for recreational
77 opportunities and the production of raw materials for wood-using industries.
78

79 Management must balance local needs with broader state, national and global concerns
80 through integration of sound forestry, wildlife, fisheries, endangered resources, water
81 quality, soil, and recreational practices. Management will provide this variety of products
82 and amenities for the future through the use of sustainable forest management practices.
83

84 105 **GOAL OF THE VILAS COUNTY FORESTRY PLAN PURSUANT TO §28.11,**
85 **WIS. STATS.** (Hereinafter referred to as the ‘Plan’)

86 In this ‘Plan’ the term ‘Vilas County Forestry Plan’ refers exclusively to §28.11, Wis.
87 Stats. and specifically how it is defined therein.

88 To administer the County Forest program in a manner consistent with the Mission
89 Statement, with consideration to recommendations from interested citizens’ groups and
90 consistent with the purpose of the County Forest Law stated in Chapter 28.11, Wisconsin
91 Statutes, as follows ‘...To provide the basis for a permanent program of county forests
92 and to enable and encourage the planned development and management of the county

forests for optimum production of forest products, together with recreational opportunities, wildlife, watershed protection, and stabilization of stream flow, giving full recognition to the concept of multiple use to assure maximum public benefits; to protect the public rights, interests, and investments in such lands; to compensate the counties for the public uses, benefits, and privileges these lands provide; all in a manner which will provide a reasonable revenue to the towns in which such lands lie.’

110 CHAPTER 100 OBJECTIVE

1. To recognize the authority of the County and State in the administration and development of operating policies on the Vilas County Forest.
2. To provide the reader of the plan with background information regarding the county forest.

115 STATUTORY AUTHORITY

Wisconsin Statutes Chapters 28.10 and 28.11 set up three levels of government as being administratively and financially involved with this program: state, counties, and towns. Essentially, state participation is in contributions to financing and managing. Counties provide the land, determine local policy, provide financing and management, and govern all fiscal affairs through the Forestry, Recreation, & Land Committee of the County Board of Supervisors and the County Forest Administrator. Towns having county forest lands receive an annual payment from the county totaling 10% of gross timber sales revenue based on the acreage of each town. At present, the same towns receive from the state 30 cents per acre per year in lieu of taxes.

120 COUNTY AUTHORITY

The Vilas County Forestry Plan pursuant to §28.11, Wis. Stats. and the current Forestry Ordinance adopted by the Vilas County Board on January 29, 2002 gives authorization to the Forestry, Recreation, & Land Committee and other proper authorities of the Vilas County Board to enforce the regulations governing the use of the Vilas County Forest.

120.1 ORDINANCES

The county ordinances that apply to the administration and management of Vilas County Forest can be found in Chapter 900-8.

125 HISTORY

125.1 STATEWIDE HISTORY AND DEVELOPMENT

In 1927, the State Legislature passed the Forest Crop Law, authorizing counties to create county forests. An opinion of the Attorney General with reference to the Forest Crop Law stated that the counties would be exempt from the owner's share of annual tax. The Legislature of 1929 specifically provided that counties were exempt from paying the 'acreage share' required of private landowners. The Legislature of 1931 amended the County Forest Reserve Law of 1929. It provided for the payment of County Forest aid of ten cents per acre annually on all land within county forests entered under the Forest Crop Law. Counties were required to spend this money solely for the development of the county forest. In return for this aid, the state originally collected a seventy-five percent severance tax on the products cut on county forests. This was reduced to fifty percent in 1937 and then to twenty percent of gross sales in 1963.

In 1963, several major revisions were made to the County Forest Law. The most notable change was the creation of a permanent program of forests that would be managed in accordance with a 10 Year Comprehensive Land Use Plan developed by the county, with the assistance of the Department of Natural Resources. The severance tax on harvested forest products still remains at 20% of the stumpage value, although no severance tax is collected if counties do not have a loan balance. A number of grants, loans and shared revenue payments are currently available to counties to help offset any losses in taxes due to public ownership. The acreage share payment to towns is currently 30¢/acre. In addition, towns with county forest land receive a minimum of 10% of the stumpage

revenue from their respective County Forest each year. Stumpage revenues exceed \$18,000,000 annually.

Twenty-nine counties in Wisconsin now own approximately two and one-third million acres entered under the County Forest Law.

125.2 VILAS COUNTY FOREST PROGRAM HISTORY AND DEVELOPMENT

At one time, much of Wisconsin was covered with magnificent stands of pine, hemlock, and hardwoods on the highlands, and cedar, spruce, and balsam on its lowlands. From 1860 to about 1910, these forests provided raw material for a thriving lumber industry. The need to supply lumber for a growing nation, and the lack of sound forest management, resulted in over harvest of the forests and degradation of the landscape. Immigrants rushed to these newly cleared lands, hungry for a place to farm and build their lives. But in just a few years, the soils gave out, catastrophic fires occurred, and many people were forced to seek their fortunes elsewhere. The land was left exhausted and tax delinquent. The Wisconsin County Forest program originated with the taking of these tax delinquent lands.

Vilas County officially entered lands under the County Forest Reserve Law on March 18, 1933 with the first aid payment being received in January 1935. The first Vilas County Forestry Ordinance was adopted on August 26, 1936. Starting in 1940, county appropriations to the forestry accounts from the general fund were started on an irregular basis, depending on needs. From 1950 on, monies were appropriated each year. Vilas County operated from 1936 until 1952 with no administrator. Management of the county land was handled through the Extension Department in cooperation with the Agriculture and Forestry Committee. In 1952, a full-time administrator was hired, A. Richard Guth. By this time, the committee name was changed to Forestry, Recreation, & Land Committee, and the Agriculture Committee was separated. A. Richard Guth was Forest Administrator until 1957 and was followed by Anthony Mutter who was Administrator

180 until 1965. Walter Mayo was Forest Administrator from 1965 through 1979. From 1979
181 through 1993 Thomas Fegers, Jr. acted as Forest Administrator and was followed by
182 Lawrence L. Stevens. The Forest Administrator is directly responsible to the Forestry,
183 Recreation, & Land Committee. His responsibilities and duties are covered in Section
184 205.1.2.

185
186 Vilas County's early history is little known. The first trading post was established in
187 1818. At this time, there were a few settlements of Chippewa Indians. In 1856 land was
188 acquired from the General Land Offices for the harvest of timber, but it was 25 years later
189 when harvesting of the pinery began. The exploitation of the forests started in the 1880's
190 when railroads entered the area. Large sawmills were built at Arbor Vitae, Winegar
191 (Presque Isle), Eagle River, Conover, Phelps, and Winchester. Some of these mills and
192 harvesting operations employed over 100 men each. By 1920, most of the choice timber
193 was cut and the mills closed.

194
195 After the land was cut, it was cleared and converted to farm land, and an auxiliary
196 summer resort industry was established. Farms grew rapidly after the timber was gone,
197 with dairying becoming the most important; but farming never became extensive, due to
198 the short growing season. By 1935, there were 673 farms and 52,279 acres in farmland.
199 Since 1935, farms have steadily declined to 7,500 acres in 1982 with the last dairy farm
200 going out of business in 1978. Major crops were hay, oats, potatoes, and corn. Today,
201 farming is less important in Vilas County than in any other county in the state with 70%
202 of the land in forest cover.

203 204 125.3 WISCONSIN COUNTY FORESTS ASSOCIATION

205 Vilas County is a member of the Wisconsin County Forests Association, Inc. (WCFA).
206 This Association was incorporated on May 15, 1968 under Chapter 181 of the Wisconsin
207 Statutes, without stock and not for profit. The WCFA Board of Directors is composed of
208 ten delegates elected from the County Forestry Committees who are members of the

Association. This corporation provides a forum for consideration of issues and policy that are common to all of the County committees responsible for their respective County Forest programs, including those programs encompassed under §28.11 and Chapter 77, Wis. Stats. WCFA also provides leadership and counsel to County Forest administrators and forestry committees through regular meetings and active committees on legislative and recreational issues.

130 DESCRIPTION OF THE FOREST

130.1 NATURAL FEATURES

130.1.1 Topography and Climate

Vilas County lies in the Northern Highland physiographic region of Wisconsin. The topography of the county is a result of glacial activity. The part of the glacier that covered Vilas County included the Langlade Lobe in the northeast part of the County, the Ontonagon Lobe in the north and northeast, and the Wisconsin Valley Lobe in the central and west part of the County. When the glaciers retreated for the last time, the formerly uneven rocky terrain was transformed into a diverse landscape. Vilas County's diverse landscape ranges from a broad, nearly level glacial outwash plain to rough, broken glacial moraines and areas of pitted outwash. Vilas County has three distinct physiographic areas: the drumlins and ground moraines in the eastern part of the county, the Winegar Moraine region which extends across the northwest, and the third region is that part which lies outside the two moraine areas, and is an outwash plain. The drumlins and ground moraines are characterized by low, smoothly rounded, elongated, and oval ridges nearly level to moderately steep and are interspersed with long, narrow drainageways. The Winegar moraine is mostly undulating to steep. It is characterized by short steep slopes and ridges. There are numerous wet depressions with no outlets. The outwash plain is pitted, resulting in rolling hills with many enclosed basins and depressions. There are large sand flats scattered throughout Eagle River, Conover, St. Germain, Manitowish Waters, and Boulder Junction. Some of these flats are characterized by low relief, and some are pitted. The outwash also has some end moraines and drumlins scattered

throughout. Vilas County was a calving ground for icebergs breaking off the retreating edge of the glacier. The ice blocks became buried in the drift and upon melting, formed deep pits or kettles. Although relief is low, Vilas County has some of the highest elevations in the state, ranging from 1,560 feet above sea level to 1,845 feet above sea level. Vilas County is the source of several major river systems. The Wisconsin River and its tributaries originate in Vilas County, and drain 40% of the county. The Bear, Manitowish, and Turtle Rivers, along with Squaw Creek, also draining about 40% of Vilas County, drain into and form the Flambeau River, which subsequently drains into the Mississippi River. The Presque Isle River and Tenderfoot Creek drain into Lake Superior. The Brule, Elvov, and Kentuck Rivers drain into the Brule and Menomonee Rivers, and finally into Lake Michigan. The county has an abundance of lakes (1,321 natural lakes) of glacial origin. Many of these lakes have no outlets. Swamps and marshes are equally abundant. Some are filled lakes, while others are the result of poor drainage. Powell Marsh is one of these; it is 18 square miles near Manitowish Waters, and serves as a Wisconsin DNR waterfowl refuge, and also supports a cranberry industry. These swamps and marshes are natural reservoirs which regulate water levels and control spring flooding.

Vilas County experiences very cold winters and short and fairly warm summers. The average winter temperature is 13 degrees F., with an average daily minimum temperature of 3 degrees F. The average summer temperature is 64 degrees F. with an average daily maximum temperature of 75 degrees F. Annual precipitation is 34". The month of February has the lowest rainfall of .97". August has the highest average rainfall of 5.21". About 25" or 70% of the yearly rainfall comes between the months of April to September. The yearly average snowfall is 85". There is yearly an average of 87 days with at least 1" of snow cover. The sun shines 60% of the time in summer and 80% of the time in winter. The prevailing wind is from the west or northwest with spring having the highest average wind speed of 13 mph. Relative humidity averages 60% in mid-afternoon and higher during the night. There is usually a short freeze period in summer

which is a limiting factor in raising crops.

130.1.2 Geology and Soils

Most of the soils in Vilas County formed in glacial material. Some formed in organic material. Soils associated with the end moraine in the northwestern part of the county formed in fine sandy loam and sandy loam glacial drift. Topography is undulating to steep. Nearly level to moderately steep silt loam and fine sandy loam soils are associated with the drumlin and ground moraine area in the eastern part of the county. The Gogebic soils occur in the Winegar Moraines. The Champion Soil Series are associated with the drumlins. These two areas respectively are characterized as having a dense, firm layer in the subsoil called a fragipan. This fragipan causes trees to be shallow rooted, and windthrow of trees is a hazard on these soils. Soils in the central part of the county formed mostly in sand or stratified sand and gravel glacial outwash. Some of these soils have a 10" to 40" loamy layer overlying the sand or gravel. These soils, the Padus and Pence series, support some of the better stands of hardwoods in this area. The sandy and loamy sand soils, mostly the Rubicon and Sayner series, characterize the conditions that exist on much of the county forest. Slopes on these soils range from nearly level to very steep. These soils are too droughty for general agriculture use, but support stands of Pine and Aspen. Organic soils are extensive in the county, but the percentage is relatively low in the area of the county forest. Because of their sandy and droughty nature, most of the soils on the county forest are of relatively low agricultural value. However, they will respond well to liberal applications of lime, commercial fertilizers, and irrigation, as evidenced by high yields of some specialty crops, such as potatoes. A generalized soil map is found in Chapter 900. Detailed soil information is found in Soil Survey for Vilas County, Wisconsin produced by the USDA Soil Conservation Service.

130.1.3 Geography

Vilas County is approximately 652,067 acres in size with 555,374 acres of land and 96,693 acres of water in lakes and streams. The Vilas County Forest contains 40,860.39

acres, 6% of the area of the county.

130.1.4 Biological Communities

Wisconsin's county forests are part of a larger landscape and are managed not as sole entities but as part of a larger ecoregion. The National Hierarchical Framework of Ecological Units (NHFEU) categorizes Wisconsin into two provinces, the Laurentian Mixed Forest (212) forming the northern half of the State and the Eastern Broadleaf Forest (222). Within each province are sections, subsections and landtype associations that further group land into areas with similar geology, soil types, surface water features, wetlands and historic and potential plant communities. The Vilas County Forest is encompassed within the Laurentian Mixed Forest province and the Northern Highland Pitted Outwash Subsection. On the Vilas County Forest Landtype Associations (LTA's) within the subsections include: Vilas-Oneida Sandy Hills, Vilas-Oneida Outwash Plains, and Vilas-Oneida Loamy Hills. LTA's, having common ecological characteristics, allow land managers to better plan for future vegetative communities, wildlife species to feature, and compatible recreation uses.

A biological community is an assemblage of different plant and animal species, living together in a particular area, at a particular time in specific habitats. Communities are named for their dominant plant species. The following biological communities are found on the Vilas County Forest:

Northern Forest: *Contains mixed deciduous and coniferous forests found in a distinct climatic zone that occurs north of the tension zone.*

Grasslands: *Characterized by the absence of trees and large shrubs and the dominance of grass and forb species.*

Wetlands: *Characterized by soils or substrate which are periodically saturated or covered by water.*

Aquatic Communities: *Includes springs, ponds, lakes, streams, and rivers.*

130.1.5 Vegetative Cover Types

Approximately 89% of the Vilas County Forest land base is forested. Approximately 55% of the commercial forestland is comprised of deciduous tree species with coniferous species occupying about 41%. The remainder is primarily an open landscape comprised of wetland, lowland shrubs, upland shrubs, bogs, lakes, streams, grassy openings, roads, rock outcroppings, and utility right-of-ways. The forest, which may include endangered and threatened plants, is 40,860.39 acres in size, with 14 forest cover types comprising the commercial forest. The Aspen type presently comprises approximately 43% of the total commercial forest acreage. Chapter 900 contains details of the present forest cover type acreage. The great majority of the forest is located in the eastern 1/2 of the county. The forest is comprised of scattered tracts and blocks which are located west and north of Eagle River to just south of Land O'Lakes. Chapter 900 contains a map showing the location of the county forest.

The long-term management goal for the Vilas County Forest is ecosystem conservation to supply sustainable forest resources. This is accomplished by working within the biological potential of forest communities by enhancing the dynamics of the forest through management activities. This will ultimately result in a representation of diverse forest communities across the landscape. The acreage of communities will change over time, reflecting their biological potential. Theoretically, for example, bringing the Aspen community type to a regulated age-class distribution would result in a harvest of approximately 300 acres per year. However, it must be recognized that opportunities will arise within a forest community that will allow managed change from one community type to another, primarily influenced by the biologic potential of the site.

130.1.6 Wildlife

The Vilas County Forest is habitat for wildlife common to northern Wisconsin. No formal survey has been conducted to identify or inventory the fauna occurring on the forest.

Numerous species of songbirds, waterfowl, raptors, shorebirds, reptiles, amphibians, fish and mammals frequent the forest. Each species, or interacting group of species, do best under different conditions, ranging from recently disturbed ground to old growth. A diversity of plant communities is key to providing a niche for a variety of wildlife species. For example, two very popular wildlife species in the county are white-tailed deer and the ruffed grouse. The Aspen forest type is recognized as key habitat for these species and is important in maintaining biological diversity across North America.

Permanently sodded, grassy openings within the forest, many originating from old log landings, camps, old farms, or frost pockets are vital components of forest wildlife habitat. An effort is being made to maintain and improve the quality and, in some cases, the quantity of openings.

130.1.7 Rare and Endangered Resources

A review of the National Heritage Inventory (NHI) indicates the presence of a number of rare species, natural communities, and unique natural features on the Vilas County Forest. See Chapter 800 for a listing of threatened and endangered species in the Forest. To protect their continued existence, the County Forestry Department will restrict vehicular access and modify or protect habitat through Forest Management Practices with assistance from DNR Wildlife Managers and the Bureau of Endangered Resources.

130.1.8 Water

Vilas County has 96,693 acres of water comprised of 1,321 lakes and flowages and 402 miles of streams. Some of these are classified as trout streams. Within the County Forest boundaries there is a variety of fishery resources. Approximately 45 named and 28 unnamed lakes have all or portions of their shorelines under county ownership. In addition, the county owns frontage on over 11 named trout streams. An inventory of the surface water resources in the Vilas County Forest can be found in Chapter 900, Appendix. Vilas County has 18 streams totaling 59.2 miles, which are classified as

Outstanding and Exceptional Resource Waters. Note: An entire listing of the Outstanding and Exceptional Resource Waters can be found in Chapter 900 and Wisconsin Admin. Code NR102.10 and 102.11.

130.2 CULTURAL FACTORS

130.2.1 Recreation

Forest-based recreation has expanded rapidly in recent years in Vilas County. Recreational opportunities with developed facilities include parks, beaches, campgrounds, boat landings, panfishing piers, picnic areas, canoe campsites, and snowmobile, hunter/hiking, mountain biking, and cross-country ski trails, and a shooting range. The county forest also provides tremendous opportunities for informal recreational pursuits not requiring developments. These include hunting, fishing, berry and mushroom picking, bird watching, hiking, mountain biking, and sight-seeing.

130.2.2 Economy

The county forest plays a major role in the economy of Vilas County, providing employment in the production and manufacture of forest products and spin-off industries in tourism derived from recreational opportunities on the Forest.

130.2.3 Roads & Access

All Vilas County Forest lands are open for public use and for foot travel. In addition, the county forest is served by a network of town, county, state, and federal highways. There is also a system of forest roads and trails which provide at least seasonal access to almost every section of land in the forest. Most of the roads are quite serviceable except for short periods during spring breakup. The County Forest Map found in Chapter 900 displays the network of roads and major trails within the County Forest. 47.7 miles of County Forest Roads are maintained by the Forestry, Recreation, & Land Department.

130.2.4 Education and Research

Education and research continue to be critical components in making decisions that affect our natural resources. As public needs and demands of our forest and its products increase, we must be prepared to assure that sound decisions result. To this end, Vilas County encourages and supports research efforts that have an impact on the forest. Utilizing its staff, the Forestry Department will continue its education efforts and maintain its working relationship with other agencies such as Trees for Tomorrow to support and provide education opportunities that promote a better understanding of forest communities and management.

130.2.5 Trends

The values and uses of the Vilas County Forest contribute significantly to fulfilling many of society's ecological and socioeconomic needs now and in the future. Changing trends will impact the values and uses of the forest in coming years.

1. Greater demands are being placed on the forest by people using it to fulfill their recreational pursuits. Because of the special appeal of the northwoods and its lakes, these demands will likely increase.
2. Demands for timber products are predicted to increase. At the same time, more timberland is being lost to residential development, and forest landowners are decreasingly interested in managing land primarily for timber values. The amount of timber harvested annually from the Vilas County Forest will not increase with the demand, as the forest is managed under the concept of sustained yield forestry.
3. Wisconsin's forests are naturally changing due to forest succession. Most of the county forest acreage statewide is a result of regeneration or planting from the early to mid 1900's. Mid to late successional northern hardwood forests are replacing the early successional Aspen-Birch, Oak, and Jack Pine forests of the 1940's through the 1970's. The Aspen cover type is key habitat for many of the state's premier game species including deer, ruffed grouse, snowshoe hare, and woodcock. A declining harvest and a movement away from even-aged species on

Wisconsin's National and State Forests may place the responsibility of maintaining Aspen, Birch, and Jack Pine types on the county forests. The county forest system currently has 51% of the state's public land base and 24% of the Aspen resource.

4. Conflict over timber management practices will likely continue to increase as more individuals and groups demand greater involvement in forestry decisions. Practices such as clearcutting and even-aged management will continue to be controversial. Efforts to educate the public on the merits of these sound forest management techniques will continue.
5. Vilas County may experience funding problems as municipalities are being required to provide more services with less money. Potential losses of revenue from decreased shared revenues and resistance to tax increases may make county timber revenues increasingly important to the finances of county governments. This is complicated by increasing public pressure to reduce timber harvests on county forests.
6. Increasing knowledge about the wider variety of species and their habitat needs is leading to a growing list of threatened and endangered species. This could lead to improvements in managing the forest and mitigating impacts to these species. Mitigating measures have the potential to impede recreational and forest management activities. Refer to Chapter 800 (840) for specifics on this subject.
7. Invasive exotic species pose an ever-increasing threat to the county forest. Gypsy moth, Asian long-horned beetle, garlic mustard, buckthorn, and honeysuckle have all gained a foothold in Wisconsin's forests. Refer to Chapter 800 (830.4) for specifics on this subject.
8. The forest is considered to be an outdoor classroom serving all age groups. It consists of diverse communities with a large variety of plant and animal life, giving ample opportunity for study and observation.

130.3 COUNTY FOREST OWNERSHIP

The County Forest is divided into 40 management compartments ranging in size from 308 acres to 1,725 acres. Compartments are further divided into forest stands of trees of similar species and habitat types to aid in making management decisions. Within the county forest boundary (approximately 132 square miles) about 35% of the land is county owned with most of the remaining 65% in small private holdings. A map of these compartments can be found in Chapter 900.

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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200 GENERAL ADMINISTRATION

Objectives

1. To comply with and implement the provisions of the County Forestry Ordinance.
2. To administer and manage the County Forest in accordance with §28.11, Wis. Stats.
3. To cooperate with the Department of Natural Resources and other agencies and organizations in the interest of furthering the optimum management of the forest on a sustainable basis.
4. To provide adequate financial support for the program by using county designated revenues and appropriations, along with funds available from federal and state sources.
5. To maintain an adequate system of accounts, records and reports for the orderly administration of the forest and to provide the basis of evaluation of program needs and implementation.
6. To facilitate the administration of the forest by authorizing personnel, equipment and facilities necessary to assist the Committee and the Administrator in carrying out their duties.

205 ROLES

The County and the Department of Natural Resources have a mutual interest in administration of the County Forest. It shall be the policy of the County Board through the Forestry, Recreation, & Land Committee to cooperate to the fullest extent with county and state personnel in carrying out the program on the county forest and to perpetuate the State/County partnership through the administration of the county forest. The County/State roles are further defined in the Public Forest Lands handbook, 2460.5.

205.1 COUNTY BOARD OF SUPERVISORS

The Vilas County Forestry Ordinance adopted 29 January 2002 prescribes rules and regulations for the administration of county powers and duties as provided in Chapter 26, 27, 28, 29 and 59 of the Wisconsin Statutes, under which the Vilas County Board of Supervisors is granted specific powers relative to the establishment, development, management and protection of the county forest to provide for the sustained yield of forest

products for commercial use and the associated benefits of soil and water conservation, scenic and recreational values, and fish and wildlife resources; all in cooperation with the Wisconsin Department of Natural Resources.

205.1.1 Forestry Committee

The Board of Supervisors assigns the administration of the County Forest to the Forestry, Recreation, & Land Committee as detailed below and under ‘The Duties of Vilas County Committees’ in the Vilas County Official Directory.

1. Preparation of an annual work plan and budget for the ensuing calendar year to be presented for the Board's approval.
2. Establishment and maintenance of the facilities necessary to conduct forest operations.
3. Negotiations for and acquisition of lands necessary to further the objectives of the county forest.
4. Review and approval of all proposed recreation projects on the county forest lands.
5. Cooperation with the Department of Natural Resources on all matters pertaining to natural resource management on the county forest.
6. Participation in all other activities involved in the execution and administration of forestry operations in the county forest program.
7. Employ personnel, per County Board approval, to administer and implement the county forest program
8. Hold committee meetings as necessary to carry out the above duties.

205.1.2 Forest Administrator

1. The Forest Administrator will act as the agent of the committee and will carry out its orders, as well as execute assignments outlined in the Vilas County Forestry Plan, pursuant to §28.11, Wis. Stats. and annual plan, all within the framework outlined in §28.11, Wis. Stats.
2. The Forest Administrator will prepare an agenda for and will be present at all

Forestry, Recreation, & Land Committee meetings.

3. The Forest Administrator will record minutes of each meeting and distribute as appropriate, as well as maintain a permanent record of the minutes.
4. The Forest Administrator will serve as the Director of the Forestry Department in coordinating the programs of work of staff members and other matters as directed by the Committee.
5. The Forest Administrator will supervise the timber sale program, tree planting, site preparation, timber stand improvement, road and firebreak construction and maintenance, land acquisition, entry and withdrawal of county forest lands, trespass investigations, and long and short term planning, all within the restrictions of §28.11 Wis. Stats.
6. To accomplish these tasks the Forest Administrator shall be a professional forester, a graduate of a college or university accredited by the Society of American Foresters, and shall have obtained or be able to obtain accreditation as a Certified Forester through the Society of American Foresters.

205.2 DEPARTMENT OF NATURAL RESOURCES

The role of the Department of Natural Resources in the County

Forest program is to:

- (1) Encourage technically sound management of the County Forest resources.
- (2) Protect the public rights, benefits and investments in County Forest lands.
- (3) Administer State compensation to the County for the public rights, benefits and privileges the county forest lands provide as required by §28.11 (a), (b), Wis. Stats.
- (4) Provide County Forest assistance consistent with those identified in Chapter 200 of the Public Forest Lands handbook and as referenced in Chapter 900 of this plan.

205.2.1 Central Office - Madison

It is the function of this office to:

1. Certify and make forest aid payments (variable acreage and project loans) to the county and audit county expenditures of the Forestry Fund account pursuant to §28.11 (8) (b) Wis. Stats.

2. Certify and make acreage payments to towns pursuant to s. 28.11 (8) (a) Wis. Stats.
3. Maintain and certify County Forest acreage by township, and audit distribution of severance share payments (§28.11(9)(2d) Wis. Stats.) made annually by the counties.
4. Collect severance share payments of not less than twenty percent of actual stumpage sales value on timber cut from the County Forest pursuant to §28.11 (9) (a) Wis. Stats.
5. Administer various aids and grants pertaining, but not limited to, the County Forest program.
6. Assist with development and implementation of the Vilas County Forestry Plan, pursuant to §28.11, Wis. Stats.
7. Interpret and administer the laws and regulations set forth by the Legislature and the Natural Resources Board.
8. Review and approve or deny applications for withdrawal and entry of lands into the County Forest Law program.
9. Act as Forest Certification Group Administrator. As the certification group manager, the Division of Forestry Central Office will be responsible for overall administration of the certification effort in both the Sustainable Forestry Initiative (SFI) and Forest Stewardship Council (FSC) certification groups. The DNR County Forest Specialist will work in close cooperation with the Wisconsin County Forests Association in coordinating this effort. Further information contained in Section 235 of this chapter.

205.2.2 Local Office

Field representatives of the Department of Natural Resources are available to provide technical advice and assistance to the county in natural resources management. This assistance includes, but is not limited to the following:

205.2.2.1 Forest Management

The forester designated by the Department of Natural Resources to serve as liaison to the

Committee will provide technical assistance in managing the resources of the county forest. The forester's duties include the following:

1. Attend all Committee meetings and any county board meetings as requested.
2. Assist in establishing, inspecting, and administering timber sales in cooperation with county forest personnel.
3. Process timber sale approvals, cutting notices and reports.
4. Maintain for the Department a record of forest management accomplishments, forms and maps.
5. Assist in preparation of projects, plans, and estimates.
6. Provide assistance to the Committee in the preparation of the annual budget, annual work plan and the Vilas County Forestry Plan, pursuant to §28.11, Wis. Stats.
7. Assist in County Forest timber theft, trespass, and larceny investigations.
8. Participate in resource planning affecting the County Forest including, but not limited to preparation of maps from aerial photos and completion and maintenance of compartment reconnaissance.
9. Facilitate the application of the state recon system with county geographic information systems (GIS).
10. Coordinate with the Forest administrator all DNR activities that occur on or affect the county forest to promote integrated management. Organize and prepare minutes of annual partnership meeting as required in Chapter 210-65, Public Forest Lands handbook.

205.2.2.2 Other DNR Program Functions

1. Fire Management - Maintain a system of communications, equipment, and trained personnel to prevent and suppress forest fires, assist with prescribed burns and enforce forest related laws.
2. Forest Pest Control - Provide technical services for prevention, detection and suppression of forest pests in the region.
3. Wildlife Management - Conduct surveys of wildlife populations, habitat,

and public use. Wildlife personnel use this information when providing technical assistance in long-term ecosystem planning as well as wildlife habitat management, habitat improvement and wildlife health. Attend committee meetings as requested.

4. Fisheries Management - Maintain the quality of the fishery resource in the waters of the Forest to produce a balanced return to the angler, consistent with sound management principles.
5. Law Enforcement - Enforce state natural resource laws and regulations and assist in the enforcement of county and federal natural resource laws and ordinances.
6. Environmental Protection - Enforce and provide technical assistance in matters related to water and shore land management, pollution detection and waste disposal.
7. Endangered Resources - Provide technical expertise on rare, threatened or endangered species and natural community surveys, identification and management. Assist other DNR functions and the county in identifying local and landscape level issues.

210 COOPERATION

The policy in dealing with other public agencies, non-profit organizations, private individuals and public utilities is to meet the obligations of the County to the public in accordance with s. 28.11 Wis. Stats. while maintaining the best interests of Vilas County. Unless otherwise delegated to the forest administrator, all considerations for special cooperation will be brought before the Committee.

210.1 PUBLIC AGENCIES

The county will cooperate with public agencies, such as the University of Wisconsin Extension, Natural Resources Conservation Service, Land Conservation Committee and others to provide consultation services within their respective fields. In turn, the Committee will cooperate with agencies and municipalities in the best interests of the public.

247
248
249 210.1.1 Research Agencies

250 As stated in §16.04(18) of the County Forestry Ordinance, the Committee may enter into
251 agreements with the North Central Forest Experiment Station of the United States
252 Department of Agriculture, the University of Wisconsin and other research agencies for the
253 purpose of conducting forest research. This may involve the use of county forestlands,
254 labor, materials and equipment.
255

256 210.1.2 State Historical Society

257 The county will collaborate with the State Historical Society on projects bearing historical
258 significance and will comply with §44.30 Wis. Stats. DNR Manual Code 1810.1 exempts
259 many projects from historical / cultural review however, forest certification standards
260 require a review on all land disturbing projects. The DNR liaison will check the historic
261 properties map set on the DNR intranet
262 (http://intranet.dnr.state.wi.us/int/land/facilities/facilities_management/arch/) for all timber
263 sales and other potentially ground disturbing projects. A contact should be made with the
264 DNR's Cultural Resource specialist if a cultural or archeological site is identified on the
265 map set. Information on the presence or absence of archeological / cultural resources will
266 be included in the timber sale narratives.
267

268 210.2 NON-PROFIT ORGANIZATIONS

269 Cooperation with non-profit organizations will be considered on an individual project
270 basis. Local organizations and those involved with education will have priority.
271

272 210.3 PRIVATE INDIVIDUALS OR INDUSTRY

273 Unless specifically provided for in the Vilas County Forestry Plan, pursuant to §28.11, Wis.
274 Stats. any business proposals or requests by private individuals or industry concerning the
275 County Forest will be brought before the Committee.
276
277

278 **210.4 TRIBAL NATIONS**

279 The County will collaborate with Tribal representatives on projects that could potentially
280 impact Native American archeological or cultural resources. Native American tribes are
281 encouraged to contribute to the Vilas County Forestry Plan, pursuant to §28.11, Wis. Stats.
282 planning process. Gathering rights for Tribal members on County Forest land is provided
283 and detailed in Chapter 525 of this Plan.

284
285 **215 FINANCIAL SUPPORT**

286 An annual budget shall be prepared by the Committee. This budget shall contain county,
287 state, private, non-profit and federal funds needed to carry out the forestry, park and
288 recreation program on the forest.

289
290 **215.1 REVENUE FROM OPERATIONS**

291 The following procedure will apply in crediting income from the forest:

292 **215.1.1 Timber Sale Revenue**

293 All revenue received from the sale of timber stumpage or cut forest products, except income
294 specified in §16.05 of the County Forestry Ordinance, shall be deposited in the Vilas
295 County General Fund. All severance taxes incurred as result of such sales shall be
296 segregated into a separate account from timber sales income and paid as required by statute.

297
298 **215.1.2 Parks and Recreation Revenue**

299 All revenue including, but not limited to, camping fees, rental fees, day use and trail use
300 fees shall be deposited in the General Fund. Donations received at any recreation facility
301 shall be deposited as revenue under the appropriate account and expended to maintain or
302 improve that facility.

303
304 **215.1.3 Other County Forest Revenue**

305 All revenue collected from fees and use permits, sale of building materials, sale of surplus
306 materials and equipment, fire or other damage collections, or other revenue received by the
307 committee shall be deposited in the General Fund.

215.1.4 County Land Fund

County Board Resolutions 82-61 and 98-49 established a non-lapsing account wherein all proceeds from the sale or trade of County owned lands shall be deposited in the County Land Fund (Segregated Land Account). The purpose of this Fund is to purchase lands to improve the blocking and administration of the County Forest. Per the above Resolutions, the County Land Fund is capped at \$200,000.00. Proceeds that exceed the cap shall be deposited in the General Fund.

215.2 OUTSIDE SOURCES OF REVENUE

State, Federal and other funds will be sought and utilized by the Committee to extend local funds as much as possible. After feasibility is determined, the Committee will prepare the necessary resolutions for County Board approval and will develop the necessary applications.

215.2.1 State Funds

In addition to other state funds that may subsequently become available for county use, the following state funding sources will be used where appropriate in administration of the Forest:

1. Variable Acreage Share Loan (§28.11 (8)(b)(1) Wis. Stats.). The County may apply for variable acreage share loans from zero to fifty cents per acre of regular entry County Forest land by December 31. Payment is made to the county on or before March 31st of each year and deposited in the State Forest Aid fund. Application is made by County Board resolution.
2. Project loans (s. 28.11 (8)(b)(2) Wis. Stats.) are available to undertake acquisition and development projects of an "economically productive nature". Fish and Game projects or recreation projects do not qualify. Application is made by County Board resolution.
3. County Forest Administrator Grant Program (s. 28.11(5)(5m) Wis. Stats). Annual grants are available to fund up to 50% of the salary and benefits of a professional forester in the position of county forest administrator or assistant county forest administrator. Benefits may not exceed 40% of salary.

Application is made by County Board resolution with payment by April 15th of each year.

4. Sustainable County Forest Grants. Annual grants made for short-term projects that promote sustainable forestry. Details are contained in NR47.75 of Wisconsin Administrative Code.
5. County Conservation Aids (§23.09 (12) Wis. Stats.). These funds are a 50% cost sharing aid and are to be used for projects that improve fish and wildlife resources of Vilas County. See DNR Manual Code No. 8718 for detail.
6. Wildlife Habitat Development Grant (§23.09 (17m) Wis. Stats.). This grant, funded through the forestry mil tax, provides ten cents per acre per year for wildlife habitat management. Advance funds shall be deposited in the County Wildlife Management fund account. Projects must be consistent with the scope of this plan. See Public Forest Lands handbook 2460.5, Chapter 220 or Wildlife Management Operations handbook, Chapter 20 for complete details.
7. Snowmobile Aids (§23.09 (26)(25) Wis. Stats.) These are grants for approved snowmobile projects, not restricted to county forestlands. See the DNR Manual Code No. 8719.51 and Snowmobile Aids Program Guide publication for details; also Chapter NR 50 of Wisconsin Administrative Code.
8. Motorcycle Outdoor Recreation Program (MORP) per §23.09 (25). Consult DNR publication guidelines for Motorcycle Recreation Program and Chapter NR 65 of Wisconsin Administrative Codes for details.
9. All-Terrain Vehicle (ATV) Aids Program. Provides grants for the maintenance, acquisition, development and rehabilitation of trails and intensive use areas. See Chapter NR 64 of the Wisconsin Administrative Code for details.
10. Acquisition and Development of Local Parks. Provides up to 50% matching grants for acquisition, development and renovation of local parks, trails and recreation areas.
11. County Forest Road Aids funds are available for each designated mile of

County Forest road. The certification is done on a biannual basis. The funds are deposited in the County Forest Road Aid Account, which is a non-lapsing account.

215.2.2 Federal funds and programs

In addition to others that may be available, the following funds and programs will be used where practical:

1. Land and Water Conservation Fund Act (LAWCON) This fund provides up to 50% matching grants for the acquisition, development and renovation of local parks.
2. Resource Conservation and Development (Technical Services).
3. Pittman-Robertson fund. This fund provides for wildlife management and habitat improvement.
4. Sport Fish Restoration (Dingell-Johnson) fund. This fund provides financing for fish management projects administered by DNR.
5. Small Business Administration (SBA) Tree Planting Grant Program. The SBA Grant provides 50% cost sharing for approved tree planting projects. This is administered by the DNR.
6. National Recreational Trails Act (NRTA). This legislation provides grants to develop, maintain, renovate and acquire trails for motorized, non-motorized, or combined use.
7. Federal Endangered Species fund. This fund provides cost sharing and grants for surveys, monitoring and management programs that conserve a threatened or endangered species. Contact the DNR Bureau of Endangered Resources for information.
8. Other State, federal and local grants periodically come available. Consult the Directory of State and Federal Financial Assistance Programs available from DNR Community Services specialist or visit the website www.dnr.state.wi.us/org/caer/cfa for an up-to-date list.

215.2.3 Other Funds

Other potential funding sources are groups such as Muskies, Inc., Ducks Unlimited, Ruffed Grouse Society, Trout Unlimited, Whitetails Unlimited, local sportsman's clubs, service organizations, garden clubs, youth groups, etc.

The Committee will consider donations, endowments and other gifts, whether real estate, equipment or cash. The county corporation counsel may be consulted to ascertain whether such gifts benefit the county.

220 COUNTY RECORDS

The County Forest Administrator will keep concise and orderly records and accounts of all revenue received, expenditures incurred and accomplishments resulting from the operations of the forestry department. A job description, time and expense report, and training record will be kept on each employee. All salaries, authorized employee expenses, bills for supplies and equipment, bills for other expenditures, and all credits and income are submitted to the Committee on invoices.

220.1 ACCOUNTS

All accounts and bookkeeping procedures will be handled by the Forest Administrator and Administrative Secretary or as otherwise directed by the Committee.

220.1.1 State Aid Forestry Account

Variable acreage share loans (§28.11 (8)(b)(1) Wis. Stats), project loan funds (§28.11 (8)(b)(2) Wis. Stats.), and sustainable forestry grants (NR47.75 Wis. Adm. Code) that are distributed by the DNR are deposited in this account. Expenditures of variable acreage share funds from this account are restricted to the purchase, development, preservation and maintenance of the county forest. Expenditure of project loan funds are governed by the conditions of project approval. Sustainable Forestry grants from this account must be spent specific to the approved project. Revenue received from the sale of equipment purchased with State Aid Account money must be deposited in the State Aid Account.

220.1.2 Other County Forest Accounts

The County Forestry, County Parks, and County Conservation Accounts are budgeted annually. Unused funds in these accounts lapse to the General Fund on 1 January unless authorized to be carried over by County Board action.

220.1.3 Account Numbers

<u>Name</u>	<u>Expenditure</u>	<u>Revenue</u>
COUNTY FUNDS		
Parks	55200	
Forestry	56103	
Conservation	56104	
Co. Snowmobile Trail Prog. Maintenance	55441	
Outside Revenue	56130	46822
Land Fund:		
Land Account	51560	
Land Sales Income		48322
Tax Certificates Payment	18121	
Timber Sales & Forest Revenue:		
Timber Sale Deposit	25201	25201
Forest Crop Revenue (70%)		46810
State Severance (20%)		24260
Town Severance (10%)		24460
County Forest Miscellaneous Revenue		46821
STATE FUNDS		
State Forest Aid	56102	43581
County Forest Road Aid	56106	43587
Fish & Game Fund (50-50 Share)	56105	43584
Wildlife Habitat Grant (10 cents/acre)	56113	43583
Snowmobile Trail Program Maintenance	55441	43571
Snowmobile Trail Program Development	55442	43572

464 **220.2 TIMBER SALES**

465 **220.2.1 Active Timber Sale Files**

466 Active timber sale files shall contain the following items:

- 467 1. Timber sale cutting notice and report (Form 2460-1)
- 468 2. Timber sale narrative (Form 2460-1A)
- 469 3. Contract and all addendums
- 470 4. Timber sale map
- 471 5. Ledger account of scale
- 472 6. Timber sale inspection journal / notes
- 473 7. Pertinent correspondence

474
475 **220.2.2 Closed Timber Sale Files**

476 Once sales have been completed and audited by DNR only the following items need to be
477 maintained in the file as a permanent record:

- 478 1. Timber sale notice and cutting report
- 479 2. Contract and addendums
- 480 3. Timber sale map
- 481 4. Pertinent correspondence

482
483 **225 PERSONNEL**

484 Under direction of the Committee, the Forest administrator shall have authorization to
485 organize the workload of the forestry department employees and arrange for additional
486 services from the county Social Services Department. Personnel of the forestry department
487 will be governed by the work policies as set forth by the County, their respective work
488 policies, and collective bargaining agreements.

489
490 **225.1 Forestry, Recreation, & Land Committee Staff**

491 The permanent employees of the County Forest at this time are the Forest Administrator,
492 Assistant Forest Administrator, Forest Technician, Snowmobile Program/Parks Technician,
493 and Administrative Secretary A. Other labor is hired on a Limited Term Employee (LTE)
494 basis or for training positions as needed.

495
496 **225.2 HIRING PERSONNEL**

497 All hiring of permanent personnel will be recommended by the Forestry, Recreation, &
498 Land Committee and the Personnel Committee, having been accounted for in the annual
499 work plan and budget. The County Board will give final approval of the hiring of new
500 personnel. The County rules for the hiring of seasonal and short-term labor will be adhered
501 to. Individuals from Vilas County who are enrolled in courses of natural resources in
502 colleges, universities, or vocational training programs shall be given preference for LTE
503 positions.
504

505 **225.3 OTHER SOURCES OF LABOR**

506 Federal and state manpower programs such as Economic Opportunity Act Programs and
507 Community Work Experience may be utilized on a project basis. The Forest Administrator
508 will recommend programs that can be utilized on the forest to the Committee for their
509 approval.
510

511 **225.4 SPECIALIZED PERSONNEL**

512 Projects requiring expenditures for specialized skills and/or operation of specialized
513 equipment are handled on a contract basis by the Committee if such skills and equipment
514 are not available from the county.
515

516 **225.5 TRAINING**

517 The Forester Administrator will be responsible for scheduling and providing appropriate
518 training to keep staff current with safety requirements, BMP's, silviculture, pesticides, new
519 technologies, and other training appropriate to manage the Vilas County Forest. A training
520 record will be retained for each employee identifying the course name, content and date of
521 attendance.
522

523 **230 EQUIPMENT**

524 All equipment and supplies will be coordinated by the Forest Administrator, subject to
525 Committee approval. The Administrator will be responsible for locating equipment,

considering the most economical alternatives of buying, borrowing, renting or construction. The Forest Administrator will also be responsible for maintaining an inventory, to be updated annually, of equipment under his/her jurisdiction. Any Forestry Department employee may purchase equipment and supplies when he/she has prior approval from the Forest Administrator. Items exceeding \$500.00 must have Committee approval prior to purchasing. Items exceeding \$5,000.00 shall be purchased by competitive bidding unless legally permissible otherwise as per §59.08, Wis. Stats. The Committee is responsible for approval of all bills before payment. Bills over \$15,000.00 require County Board approval.

230.1 FACILITIES

Maintenance of the facilities is assigned to the forest administrator and includes the following:

1. Office space is provided in the office building located at 1881 Highway 45 North, Eagle River. The office is attached to a shop and garage. An adjacent storage Building is used to store materials and equipment used in the operation of the Forest and Parks Programs. The shop and garage are also used for construction, maintenance, and repair of equipment and facilities.
2. Public Shooting Range is located in the Town of Conover.
3. Parking and snowmobile trail facilities are scattered throughout the County and include such facilities as the toilet/change rooms at Eagle Lake Park in the Town of Washington. There are numerous shelters, tables, and grills at other day-use areas and on the snowmobile trails.
4. Other recreational sites such as boat landings, fishing piers, picnic sites, and a campground are maintained on County Land as well as under agreements with other units of government and private organizations such as the Wisconsin Valley Improvement Company (Chapter 900 includes an inventory of facilities).
5. The Forestry Department is working toward complying with the Americans with Disabilities Act. When funding is available and where it is possible, the Department will continue to improve access to recreation facilities. Currently the Forestry Headquarters, a portion of Langley Lake Hunter/Hiking Trail, Deep Lake, Cooks Lake and Lake of the Hills Fishing Piers, Muskellunge Lake Landing, Dr. Oldfield

Memorial Park & Landing, Eagle Lake Park & Landing, and the Vilas County Shooting Range have been improved for accessibility.

230.2 EQUIPMENT OPERATION – DNR

Pursuant to §28.11, Wis. Stats, the County and Department of Natural Resources are authorized to actively cooperate. Fire control equipment, i.e., trucks, John Deere 450 tractors, and trailers are available to the County at DNR equipment rates to conduct the following activities:

1. Forest Production

- a. Regeneration projects
- b. Thinning projects
- c. Release projects
- d. Pruning projects
- e. Create/improve access roads

2. Forest Aesthetics

- a. Improve roads
- b. Create openings

3. Wildlife Projects

- a. Improve roads on closed timber sales
- b. Create openings

4. Recreation Projects

- a. Trail construction
- b. Trail maintenance

5. Fire Protection

- a. Construct plantation firebreaks
- b. Firebreaks around recreation sites

235 FOREST CERTIFICATION GROUP ADMINISTRATION

As the certification group manager, the Department of Natural Resources will be responsible for overall administration of the certification effort in both the Sustainable Forestry Initiative (SFI) and Forest Stewardship Council (FSC) certification groups. The

DNR County Forest Specialist will work in close cooperation with the Wisconsin County Forests Association in coordinating this effort. The group manager's responsibilities will include:

- ◆ Record keeping for both the SFI and FSC groups
- ◆ Coordinating communication with the certification auditing firms
- ◆ Reporting and payment of fees
- ◆ Processing new entries and departures from the groups
- ◆ Internal compliance monitoring
- ◆ Dispute resolution

Detail on the certification group administration is maintained in the Public Forest Lands Handbook.

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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300 MANAGEMENT PLANNING

OBJECTIVES

Management planning shall be used to establish objectives, policies, procedures, rules and regulations, and to promote an efficient and orderly program of development and management of the County Forest in the interest of:

- (1) Determining needs and priorities.
- (2) Achieving goals set forth in the mission statement of this plan.
- (3) Satisfying the statutory requirements of §28.11, Wis. Stats.
- (4) Satisfying requirements for participation in various state and federal aid programs.
- (5) Providing broad long-term and detailed short-term guidelines for actions.

305 VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

POLICY

This plan shall incorporate or reference all official County Forest policies, pertinent county regulations, planning documents, and the needs and actions for the period 2006 through 2020.

305.1 DEVELOPMENT OF THE PLAN

§28.11, Wis. Stats., places the responsibility for the plan development on the Committee with technical assistance from the Department and other agencies. The County Forest Administrator will take the lead at the Committee's request. The Department, with the assistance of the County, will prepare the environmental assessment as required by Chapter 150 of the Wisconsin Administrative Code. During the development of the preliminary draft of the plan and the environmental assessment, public input will be sought. The Committee, upon completion of the preliminary draft, will hold a public information meeting to receive comment. Such meeting shall be properly noticed via appropriate local news media with a minimum of two weeks provided between the time of notice and the time the meeting is held.

Interested citizens will be given the opportunity to review the plan in the Administrator's office or such other places as may be designated by the Forestry, Recreation, & Land Committee. Comments received by the Committee shall be given consideration in developing the final plan draft.

305.2 APPROVAL OF THE PLAN

Following the public comment period and certification by the Department, the County will consider the comments received on the plan and assessment and will finalize the plan. The Committee will then present the plan to the County Board for their approval. Following County Board approval, the plan will then be forwarded to the DNR's Central office in Madison through the local DNR liaison forester. Approval of the plan by the DNR is required by §28.11 (5)(a), Wis. Stats.

305.3 DISTRIBUTION OF THE PLAN

Each member of the County Board will receive a copy of the plan at the time of initial review and approval. Subsequently, updated official copies will be maintained for those regularly involved in the County Forest Program.

Official copies and amendments will be held by the following:

- (1) Forestry, Recreation, & Land Committee Chair and members.
- (2) Forest Administrator.
- (3) Dept. of Natural Resources: Liaison and Division of Forestry (5 copies).
- (4) Executive Secretary - Wisconsin County Forests Association.

Additional copies will be provided to DNR Regional Forestry Supervisor, Area Forestry Supervisor, and local Wildlife Biologist.

305.4 UPDATING THE PLAN

Necessary changes in policy and procedure will be incorporated into the plan by amendment as required. Amendments to the plan will require approval by both the County Board and the Dept. of Natural Resources as stated in §28.11 (5)(a), Wis. Stats. The annual work plan and budget (Chapter 2000) and the annual accomplishment report (Chapter 3000) are appended to the plan and do not require official DNR approval.

305.4.1 Schedule for Updating

By June 30th of each year the Forest Administrator will develop and distribute copies of the following to each official copyholder:

- (1) Approved amendments.
- (2) Annual Accomplishment Report.
- (3) Current annual work plan and budget.

305.5 COORDINATION WITH OTHER PLANNING

The development and any future amendments to this plan will include considerations, and if warranted, participation in other planning efforts. It is expected that these other plans will also, in turn, consider and mesh their efforts with the County Forest Plan. Coordination between Statewide Comprehensive Outdoor Recreation Plans (SCORP), State Land Master Plans, the Chequamegon-Nicolet N.F. Plan, Land & Water Resource Plans, Forest Legacy, and others is essential for effective land management.

310 FOREST RESOURCE PLANNING

The Committee will support and utilize the procedures as set forth in the Dept. of Natural Resources Public Forest Lands Handbook No. 2460.5 and Forest Aesthetic and Silviculture Handbook No. 2431.5. The DNR forester and Forest Administrator will be responsible for the completion and maintenance of the compartment reconnaissance system and will assist in interpretation of the data to be used in planning and scheduling purposes.

Forest management plans are made by qualified, professional staff employed by the County or the DNR who are trained in silvicultural principles and apply economic, biological, and environmental considerations in the planning process. Forest management decisions are made utilizing the most recent resource materials including the forest habitat type classification, soil surveys, and Wisconsin's Forestry Best Management Practices for Water Quality guidelines.

315 OUTDOOR RECREATION PLANNING

The Outdoor Recreation Plan, Snowmobile Trail Plan, and other recreation surveys, plans, and reports will be used as available in planning efforts. Additional assistance will be sought from the DNR park planners. The responsibility for all recreation planning on the County

Forest will rest with the Committee.

320 OTHER RESOURCE PLANNING

Additional data necessary to make management decisions on the County Forest will be sought from agencies or individuals best equipped to provide that service. Refer to Chapter 800 for information on integrating outside expertise into management planning.

325 FOREST CERTIFICATION

The forest products industry is increasingly requiring their suppliers to verify that the raw materials being supplied have originated from well-managed forestlands. Third-party certification of forestlands is becoming the norm for objectively evaluating the sustainable management of forestlands. To that end, Vilas County will commit to both the Sustainable Forestry Initiative® (SFI®) and the Forest Stewardship Council® (FSC®) certification standards in the management of the Vilas County Forest. These certification standards fit within the framework of the County Forest Law program (§28.11, Wis. Stats.).

Vilas County's Commitment to Sustainable Forestry

Our county forests provide a vital contribution to the State and the world by providing economic, environmental and social benefits important to our quality of life. Vilas County believes that accomplishing such sustainable forestry requires a commitment and partnership from all the groups and individuals that benefit from these public lands.

Vilas County's Commitment

Within the scope of the Wisconsin County Forest Law and the Vilas County Forestry Plan, pursuant to §28.11, Wis. Stats, Vilas County will implement forestry practices that promote forest sustainability and multiple use of the forest. In the management of the Forest that will include the sustainable harvest of forest products, the protection of special sites, wildlife, plants, water quality and aesthetics.

All forestland owners have a responsibility to provide sound forest stewardship. Vilas

County will work in cooperation with the Department of Natural Resources (DNR) and other natural resources groups/agencies in providing sustainable forestry information to those landowners and individuals impacting forest sustainability in Wisconsin. We will support research efforts to improve the health, productivity, and management of forestlands both internally and through cooperative efforts. In managing the Vilas County Forest a spectrum of forestry practices will be employed to achieve our sustainable forestry objective. Both intensive and more extensive forest management techniques will be used to provide for wildlife, forest products, recreation, aesthetics, water quality, and ecosystem maintenance. In keeping with this responsibility Vilas County is committed to the following:

1. **Sustainable Forestry Principles** – To practice sustainable forestry to meet the present needs of society without sacrificing the ability of future generations to meet their anticipated needs. In doing so, Vilas County will integrate the reforestation, managing, growing and harvesting of trees for forest products with the conservation of air and water quality, soil, ecosystem diversity, wildlife, recreation and aesthetics.
2. **Responsible Practices** – To employ practices that are economically, environmentally and socially responsible in the management of the Vilas County Forest and to also encourage other forest owners to do the same.
3. **Forest Health & Productivity** – To work cooperatively with the DNR and other agencies in protecting our forests from pests, diseases, wildfire and other damaging agents in order to improve long-term productivity and forest health.
4. **Unique Sites** – To manage areas of special biological, geographical, cultural or historical significance in such a way as to preserve their unique qualities.
5. **Legal Compliance** – To comply with applicable local, state and federal laws and regulations in the management of the Vilas County Forest.
6. **Monitoring and Continuous Improvement** – To continually seek improvement in the management of the Vilas County Forest and to monitor, assess and report performance towards the objective of sustainable forestry.

330 ORDINANCES

The following ordinances will be considered in all planning. Refer to Chapter 900 -

Appendix for full text of these ordinances:

1. Forestry Ordinance.
2. Parks Ordinance.
3. General Zoning and Shoreland Ordinance, which includes metallic and non-metallic mining.

335 TECHNOLOGY

Use of present day technology has become an important facet of county forest management. Computers and operating systems have increased the ability to analyze and store data. The increased ability to analyze and evaluate the Forest has improved planning and management of the Forest. Electronic communication is now essential. Following are technologies available, and in use, on the Vilas County Forest.

335.1 GLOBAL POSITIONING SYSTEMS

A global positioning system (GPS) is a system of electronic surveying technology utilizing satellites to determine location. GPS is based on satellite ranging. That means that a position on earth is calculated by measuring the distance from a group of satellites to that position. The basic components needed for this system are a transmitter (located in the satellites), a receiver (at the point to be identified), and a computer and software to do the actual calculations. This technology is invaluable for mapping, acreage determination, and land control efforts. Sub-meter accuracy is available with some of the survey grade units. Hand held units costing only \$200-\$300 have also proven beneficial for sale mapping and road layouts.

335.2 DATA RECORDERS

The traditional data recording method is the paper and pencil system. But there are other tools that have proven useful. Tape recorders and hand held computers are becoming commonplace. Vilas County will continue to test new types of data recorders for usability in the field and the office.

335.3 COMPUTERS

Computers are a common fixture in all offices. The different types of software currently being used include: word processing, databases, spreadsheets, and mapping and geographic information systems (GIS).

335.4 GEOGRAPHIC INFORMATION SYSTEMS

Geographic Information Systems are particularly well suited for natural resources management. A GIS interrelates spatial information, e.g. maps with tabular data, reconnaissance information, ownership, name and address. By using such a system, managers can look at the timing and spacing of timber sales, lay out aesthetic zones, buffer strips, calculate acreage, and update reconnaissance files in an efficient manner. Interrelating recon data with the GIS through a Recon ArcView Editor (RAVE) program has provided state-of-the-art mapping and data analysis in many counties. A GIS can do in a few hours what often was impossible or took months to complete.

335.5 COMPARTMENT RECONNAISSANCE (RECON)

Recon is another tool in the assessment of geographical, structural, and compositional attributes of the forest resources. This information is collected and computerized in tabular format through the DNR. The recon system has historically been the backbone of land management activities. The tabular information is linked to spatial information on hand drawn maps or computerized maps found in the GIS. Basic resource information is collected, stored, and updated systematically and continuously. The database is used to analyze existing resources, evaluate management alternatives, and assist in the development and implementation of management plans. Recon is one tool used to assess forest resource information at the property level. This information will provide a data layer that can be used for regional analysis.

335.6 RAVE/RAVEN (Recon ArcView Editor)

RAVE and RAVEN are computer programs that link the tabular data in the Recon system with the spatial data available through a GIS system. They are ArcView (GIS software)

243 custom extensions that allow the user to easily edit forest timber type and stand-level features
244 (polygons), while at the same time updating tabular records.

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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27

28 **400 COUNTY FOREST BLOCKING**

29 OBJECTIVES

- 30 (1) To provide for the most efficient administration of the Forest by consolidating and
31 blocking lands within established County Forest boundaries through purchase or
32 trade as provided in §28.11 (3) (c), Wis. Stats. (for full text see Chapter 900.1), and
33 to enter lands so acquired as County Forest, pursuant to §28.11 (4) (b), Wis. Stats.
34
- 35 (2) To provide additional public benefits through the acquisition of unique or special
36 areas that will be entered under §28.11 (4)(c) Wis. Stats. special use classification.
37
- 38 (3) To facilitate adequate land control on the County Forest by undertaking
39 establishment and perpetuation of survey corners and boundary lines.
40

41 **405 FOREST BLOCKING BOUNDARIES**

42 The County Forest blocking boundaries are established by the Committee and by
43 subsequent approval of the Vilas County Board and the DNR. A map of the official
44 boundaries is found in Chapter 900, exhibit 32.
45

46 **410 LAND ACQUISITION**

47 Lands within the County Forest blocking boundaries or areas of special or unique values
48 shall be recommended to the County Board for acquisition as they become available and
49 upon a determination by the Forestry, Recreation, & Land Committee that ownership of
50 those lands is beneficial to the people of Vilas County and the State of Wisconsin.
51

52 **410.1 METHODS OF ACQUISITION**

53 Acquisition may be by outright purchase or trade based on competent appraisal of the value
54 or values involved, or by gift, bequest or action to foreclose tax liens. The Administrator
55 will be the agent of the Committee in making first contact with potential sellers and in
56 carrying on acquisition activities. However, options for purchase must have the approval of
57 the Committee and the Vilas County Board of Supervisors.
58

410.2 FINANCING

Financing of land acquisition either within the Forest boundaries or Special Use Lands outside will come from the County Segregated Land Account established by Resolution 82-61 and Resolution 98-49. If funds are not available in the land acquisition account, advanced budgeting will be sought. State Forestry Aid Loans described in Chapter 215.2.1(1) may also be used for acquisition of lands to be entered as County Forest. County Forest project loans described in Chapter 215.2.1(2) may also be used for acquisition of lands to be entered as County Forest. Application for project loans will comply with NR.47.60, Wis. Adm. Code.

415 ENTRY OF LANDS

Lands to be entered under the regular classification of the County Forest Law must be suitable for forestry purposes and be within the County Forest boundary. Lands designated for classification as County Forest - Special Use need not be contained within the County Forest Boundary nor suitable or utilized for forestry purposes but they must be suitable for scenic, outdoor recreation, public hunting and fishing, water conservation or other multiple-use purposes.

415.1 TIME OF ENTRY

Application for entry of newly acquired lands under the County Forest Law will be made as soon as possible. Applications for entry will be prepared with the assistance of the DNR liaison. The Administrator will secure the signatures of the proper County officials, and the County Clerk will then verify County ownership and transmit the application to the Department of Natural Resources, Box 7921, Madison, WI, 53707-7921, marked attention, "County Forest Specialist."

420 WITHDRAWAL OF LANDS FROM COUNTY FOREST LAW

Lands within the County Forest Boundary will not normally be considered for withdrawal from the County Forest Law. Applications for the purchase of these lands by the private sector will be discouraged by the Committee. If, in the opinion of the Committee and County Board, the land will be put to better and higher use and will benefit people of the County and State to a greater extent, the withdrawal procedure outlined in section 420.2 will

be employed. The Public Lands Handbook also contains details on the application procedures for withdrawal. The legal means by which counties may apply for withdrawal of lands from County Forest status is provided by §28.11, Wis. Stats. Initially the County Forest Administrator notifies the DNR Liaison Forester of the County Forestry Committee Meeting at which the proposed withdrawal will be considered. At that meeting DNR personnel and the County discuss the proposed withdrawal and, if approved by the County Forestry Committee, the withdrawal will be recommended by the Committee by resolution to the County Board. If approved by the Board by the necessary 2/3 majority, the application is prepared by the County and submitted to the appropriate DNR regional forester or designee. The DNR may ask for additional information from the County and will then coordinate the public notice and proceed with needed environmental studies. Pending the results of the environmental studies and any investigatory hearings deemed necessary, the DNR will act on the withdrawal application. If the application is denied, the County may appeal as stipulated in §28.11 (11)(a), Wis. Stats.

420.1 COUNTY OWNED LANDS OUTSIDE THE BOUNDARY

County owned lands outside the Boundary may eventually be sold or exchanged as part of the effort to consolidate the ownership within the Boundary. The County may retain certain rights to these lands in accordance with County policy upon transfer of ownership, such as mineral rights, timber rights, public access rights, and/or hunting and fishing rights. Proceeds from such a land sale will be deposited in the County Segregated Land Account for the purpose of funding future County Forest Land purchases.

420.2 WITHDRAWAL PROCEDURE

The purpose of this procedure is to provide general information in formulating and processing applications for withdrawal of County Forest lands under §28.11 Wis. Stats. and Ch. NR 48, Wis. Adm. Code. The legal means by which counties may apply for withdrawal of lands from County Forests is provided by §28.11(11)(a) Wis. Stats., This section states in part: “The County Board shall first refer the resolution to the County Forestry Committee which shall consult with an authorized representative of the Department in formulating its withdrawal proposal.” §28.11(11)(a) Wis. Stats. also states: “The County Board shall not take final action thereon until 90 days after such referral or until the report

thereon of the Forestry Committee has been filed with the Board.”

Consequently, if the County Board takes final action on a withdrawal application without referring it to the County Forestry committee, the application is not valid. On the other hand, if the County Forestry Committee does not report to the County Board within 90 days after receipt of the referral, the Board may act upon the application without the Committee recommendation.

The Regional Forestry Leader is designated as the authorized representative of the DNR who shall consult with the Forestry Committee in formulating withdrawal proposals. The Regional Forestry Leader may appoint designees to represent him/her if circumstances warrant. All DNR communications concerning withdrawal of County Forest Lands shall be coordinated through the Regional Forestry Leader. The final decision for requests for withdrawal presently rests with the DNR’s Division of Forestry.

County Forest Administrator

1. Notifies DNR Liaison Forester to the County Forest of the date and place of the County Forestry Committee meeting, at which time the proposed withdrawal will be considered for formulation of a withdrawal application. Such notice shall include pertinent details of the withdrawal proposal including legal description of the lands involved and purpose of the withdrawal. The Liaison Forester shall review ch.NR 48 with the County Forest Administrator to ensure all the required information is identified for the application. NOTE: In the event a withdrawal exchange is involved, it is very important that the County postpones final financial negotiations with the owner of the land involved in the exchange until the Department has established the minimum values of the land as required in §28.11(11)(a) Wis. Stats. To protect the County interest, the necessary preliminary negotiations should also be made conditional upon approval of the withdrawal by both the County Board and DNR as provided by statutes.

DNR Liaison Forester

1. Advises their supervisor and Regional Forestry Leader immediately of the proposed withdrawal and Committee meeting date.

2. Takes action necessary to be acquainted with the proposal.
3. Consults with the Public Lands/County Forest Specialist, Bureau of Forest Management concerning the proposed withdrawal.
4. Attends County Forestry Committee meeting and consults with the Committee on proposed withdrawal.

County Forestry Committee

1. A Committee meeting is held to evaluate the proposal and to consult with DNR Regional Forestry Leader or designee and either:
 - a. Undertakes further study of the proposal; or
 - b. Rejects applicants request for withdrawal, or
 - c. Prepares resolution for County Board action recommending approval or disapproval of application.

County Board of Supervisors

1. Upon receipt of the recommendation of the County Forestry Committee, or 90 days after referral to the Committee, whichever is first, acts on resolution to approve, disapprove or modify the withdrawal application, or refer it back to the County Forestry Committee for further study.
2. If approval for withdrawal is given by two-thirds vote of membership, the County Board authorizes and directs the County Clerk and the County Forest Administrator to prepare and submit the County Forest Withdrawal Application (Form 2453-3), for withdrawal to appropriate Department Regional Forestry Leader.

Regional Forestry Leader (or designee)

1. Upon receipt of County Forest Withdrawal Application (Form 2453-3), acknowledges receipt of the application to the County Clerk with copies to the Department Liaison Forester to County Forestry Committee, County Forest Administrator, the Liaison Forester's supervisor and Bureau of Forest Management in Central Office. Requests additional information from the County as necessary to provide adequate detail for Department processing of the application. This request must be sent to the County within 60 days as identified in .NR 48.03(2), Wis. Adm. Code.
2. Consults with Public Lands/County Forest Specialist regarding specifics of the

proposal.

3. Directs DNR Liaison Forester to contact the Regional Environmental Impact Coordinator to determine if an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required under M.C. 1606.1 or if an Environmental Impact Report should be requested from the County. If required, prepares environmental documents. If an EIS is required, notifies the Bureau of Integrated Science Services to proceed in accordance with M.C. 1610.1
4. Coordinates public notice and certifies environmental proposal is in compliance with Wisconsin Environmental Policy Act (WEPA)
5. Transmits one copy of County application, approved EA/EIS, if required, and the regional recommendation to the County Forest Specialist in the Bureau of Forest Management, Division of Forestry.

Division of Forestry

Public Hearings

1. Coordinates with Bureau of Legal Services for scheduling of public hearing(s) if requested in writing by the county OR if determined by the Department to be necessary or if required as part of the WEPA procedure. Hearings are not a requirement for all withdrawals.
2. Coordinates with the Bureau of Integrated Science Services the preparation of an EIS if required.
3. The format of the Public Hearing is quite different depending on which agency requests the Hearing.
 - If the *County* requests the Hearing (must be a written request), the Hearing is considered a ‘Contested Case’ Hearing as defined in §227.01(3), Wis. Stats. The Hearing procedures and format are as directed by subchapter III, chapter 227, Wis. Stats., and chapter NR 2, Wis. Adm. Code. An Administrative Law Judge will be appointed, and upon completion of the hearing, the Administrative Law Judge normally makes and issues a decision approving or rejecting the withdrawal application.
 - If the *Department of Natural Resources* decides to conduct an ‘Investigatory ‘ Hearing, the format of the Hearing is less formal and is normally facilitated by a

DNR employee. Following an Investigatory Hearing (or if neither agency requests a hearing), the following procedure applies.

Regional Forestry Leader (or designee)

1. Prepares a “DRAFT” decision including Findings of Fact, Conclusions of Law and Order and Notification of Appeal Rights and sends draft to the Public Lands/County Forest Specialist. The draft shall, at the minimum cover the items identified in NR 48.04, Wis. Adm. Code. *Note: This draft is NOT a public record. It may not be released to the public upon request.*

Division of Forestry

1. Reviews and modifies draft documents as necessary. Upon completion of Department investigation of the withdrawal application, prepares a final draft decision including Findings of Fact, Conclusions of Law and Order and Notification of Appeal Rights, for the Administrator, Division of Forestry. *Note: This draft is NOT a public record. It may not be released to the public upon request.*

Administrator, Division of Forestry

1. Issues the final decision on the withdrawal application.

§28.11(11)2, Wis. Stats. Provides the county the right to appeal withdrawal applications that are denied either by the DNR or an Administrative Law Judge. The appeal process is pursuant to §28.11(11)(a), Wis. Stats.

If a withdrawal decision is appealed to the review committee by a county pursuant to §28.11(11)(a), Wis. Stats:

Division of Forestry

1. Keeps the Division Administrator’s and Secretary’s Office informed of all developments in the appeal process.

425 LAND SURVEYING

The importance of survey corner monumentation and the establishment and maintenance of survey lines is recognized in the interest of avoiding the problems of trespass both by and

against the County, facilitating the settlement of those cases which would occur, and aiding in the proper transfer of property.

425.1 LEGAL SURVEYING

Of prime importance are the forest boundaries and property lines in common with other owners. All such surveying shall be under the supervision of a registered surveyor. When the Office of the County Surveyor is not staffed, the Committee will comply with the provisions of Chapter 59, Wisconsin Statutes by hiring registered surveyors to perform the necessary running of property lines. Section corners, one-quarter corners, sixteenth corners, their associated witnesses, and survey lines will be established or re-established where needed. Certified Land Corner Restoration forms and the drawing of the Certified Survey shall be submitted by a registered land surveyor to the Vilas County Surveyor and the Forestry Department. Adjacent landowners who benefit from a certified survey of the County Forest Boundary shall be contacted and given the opportunity to share in the cost of the survey. There is currently 252.93 miles of boundary lines on County Lands under the jurisdiction of the Forestry Department. Of this total, 172.97 miles have been established by certified survey or by agreement and are maintained.

425.2 LOCATION OF LINES BY OTHER THAN LEGAL SURVEY

Lines abutting other ownerships may be established by mutual agreement to avert trespass claims. Forestry personnel who are not registered surveyors may, with all possible prudence, establish for forest management purposes, including those necessary for ordinary management activities such as timber sales and road and trail location using available equipment including, but not limited to, air photos, quadrangles, County Surveyor's records, and known corners. The agreement with adjacent landowner(s) shall be documented and recorded in the Forestry Department.

425.3 PRESERVATION OF LANDMARKS, MONUMENTS, AND DESTRUCTION OF MONUMENTS

§59.74, Wis. Stats., provides:

1. Penalties for destruction of landmarks, monuments and corner posts established by Government Survey, the County Surveyor or a surveyor or

public record.

2. A procedure for notification of intent to destroy such surveying evidence and referencing prior to destruction.
3. The assignment of enforcement responsibility to the Department of Natural Resources.

All personnel with land management responsibilities are directed to:

1. Make a reasonable search for the above mentioned surveying evidence prior to implementing any soil moving or cover type manipulation projects, including timber sales, that could result in covering, destruction or removal of such evidence.
2. In the event such evidence is found:
 - a. If practical, redesign the project so that the evidence will not be disturbed or
 - b. If destruction is unavoidable, notify the County Surveyor at least 30 days prior to destruction giving the legal description of the monument and the reason for destruction or other obliteration. If the County Surveyor does not re-reference the evidence within 30 days notice, the project supervisor will determine if the evidence has future value to the State and, if it does, will arrange for a re-reference by a registered surveyor or engineer.
3. If reasonable search fails to uncover survey evidence in the suspected vicinity, conduct an additional search if he/she sees fit.
4. In order to further reduce the possibility of inadvertent destruction of invaluable survey evidence:
 - a. Each Forester with County Forest responsibilities should discuss with County Forest Administrators the need for including adequate protective clauses in easements, rights-of-way, timber sale contracts, and other agreements that might result in destruction of monuments.
 - b. Personnel advising landowners regarding forestry or other land management practices should alert such owners to possible monument destruction that may be caused by them.
 - c. Any instances of potential or accomplished obliteration of survey monumentation discovered in the course of field operations should be brought to the County Surveyor's attention.

Responsibilities of the Forestry, Recreation, & Land Department:

The Forestry Department in the course of its duties shall perpetuate all survey evidence established by certified survey or mutual agreement on the County Forest.

1. Evidence including corners, witnesses to corners, and boundary lines shall be painted with blue paint periodically. Blazes marking survey lines and witnesses to corners shall be refreshed periodically. This work shall be done to maintain the survey evidence and make it apparent to others.
2. The Department's Geographic Information System includes layers of survey corners and lines with their associated reference tables. These records shall be updated as the County Forest Boundary is established.

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500 LAND USE

500.1 OBJECTIVES

- (1) To identify policies and procedures employed to effectively manage, utilize and sustain the resources of the County Forest.
- (2) Identify regulated management activities, land uses and special resource areas.

505 SILVICULTURAL PRACTICES

Silviculture is the practice of controlling forest composition, structure, and growth to maintain and enhance the forest’s utility for any purpose. These practices are based on research and general silviculture knowledge of the species being managed. The goal is to encourage vigor within all developmental stages of forest stands, managed in an even aged or uneven aged system. The application of silviculture to a diverse forest needs a unified, systematic approach. The DNR Public Forest Lands Handbook (2460.5) and DNR Silvicultural and Forest Aesthetics Handbook (2431.5) will be used as guidelines for management practices used on the County Forest.

505.1 EVEN-AGED MANAGEMENT

A forest stand composed of trees having relatively small differences in age. Typical regeneration practices include: clear cutting, shelterwood cutting and seed-tree cutting.

505.2 UNEVEN-AGED MANAGEMENT

A forest stand composed of trees that differ markedly in age. The typical cutting practice is selection cutting, where individual trees are removed from the stand. Regeneration is continually occurring after the stand is cut.

505.3 TIMBER SALES

Regulated cutting of timber is essential to the goals and objectives of this plan.

Timber harvesting will be conducted on an annual basis in an effort to achieve a sustainable harvest level. Harvest areas will be distributed in the forest to accommodate such needs as biodiversity, wildlife, aesthetics, watershed protection and other biological needs. The DNR forest reconnaissance printout will be used as the basis for planning and scheduling harvests. All sales will be established, administered and reported in accordance with the DNR Timber Sale Handbook (2461). All sales on the forest are to be advertised for public bidding, with the exception of small sales with an estimated value of \$3000 or less, or sales that would qualify under a salvage provision (§28.11(6)(c), Wis. Stats.) These sales may be sold direct without advertising.

505.3.1 Field Preparation of Timber Sales

The County and the DNR will cooperate to locate, designate and prepare harvest areas for sale. The Forest administrator and DNR liaison forester shall jointly be responsible to see that the field work on sales is accomplished.

505.3.2 Advertising for Bids

After field work is completed and necessary reports prepared for DNR approval, the administrator shall prepare a sale prospectus and make it available to interested loggers. Timber sale advertisements, at a minimum, will be by classified ad in the Vilas County News-Review and Lakeland Times newspapers, having general circulation in the county (§28.11(6)(b), Wis. Stats). Ads shall be run once each week for two consecutive weeks, the last being at least one week prior to the bid opening. A longer advance time will be given when feasible. Sealed bid sales will generally be offered in early spring and fall, or as needed.

505.3.3 Prospectus

The following information will be made available to prospective bidders:

- (1) Species to be harvested and estimated volume
- (2) Maps of sale areas
- (3) Special contract provisions

187 (4) Procedures for bidding

188 (5) Bid forms

189 (6) Timber sales bond and advance stumpage schedule

190
191 505.3.4 Method of Bidding

192 Bids will be reviewed at a meeting of the committee. A sealed envelope showing
193 tract number and marked "sealed bid" shall be submitted on County Forest bid
194 forms by the bidder for each tract bid on, and shall contain:

195 (1) The bid price per cord or per thousand board feet for each species offered
196 and the total for each species bid. The total value of the timber sale bid
197 shall be indicated on both scaled and lump sum bids. The total bid value
198 must meet or exceed the advertised sale minimum.

199 (2) A bid bond must be submitted with the bid for each tract of timber. The
200 bid bond may be in the form of a check, money order, or bank draft and
201 made payable to Vilas County. The amount of the bid bond is equal to
202 the performance deposit for each tract of timber as specified in the
203 Prospectus.

204
205 505.3.5 Awarding Sales

206 (1) The high bidder is normally awarded the sale contract; however, the
207 committee reserves the right to reject any or all bids, and accept the bid
208 offer most advantageous to the county. Grounds for rejecting bids may
209 include without limit:

210 (a) Non-compliance with County Forest contract requirements.

211 (b) Delinquent financial obligations.

212 (c) Unsatisfactory past performances.

213 (d) Inability to demonstrate financial or professional capability.

214 Evaluation criteria on timber sales will be price and documented ability to
215 satisfactorily complete the contract. Factors to be assessed may include
216 proposed equipment and operation, references, proof of financial stability,
217 past performance and documented training completed. Vilas County

requires logging contractors to be certified under the Wisconsin Sustainable Initiative Training Standard.

(2) Tie bids may be settled by toss of a coin if both parties are agreeable; otherwise the bids on the particular tract will be rejected and the sale re-advertised.

(3) A contractor may withdraw his/her bid on a particular tract prior to the opening of bids on that tract without penalty.

(4) Sales remaining unsold after being advertised for two bid openings may be sold direct at not less than the appraised value even though their estimated value exceeds \$3,000. (See DNR Timber Sales Handbook No. 2461 - Chapter 52).

505.3.6 Sales Contracts

(1) Contracts will be prepared with copies provided to the logger and the DNR with the original filed in the administrator's office.

(2) Contracts are to be signed by the successful bidder within 15 days of the sale or before cutting begins, whichever occurs first, with payment being made according to the County Timber Sale Bond and Advance Stumpage Payment Schedule. Failure to sign the contract within 15 days may result in the retention of all or part of the bid bond up to the difference in the stumpage value bid by the next highest bidder who is awarded the contract and not less than \$250.00.

505.3.7 Timber Sale Performance Bond

(1) An irrevocable letter of credit issued by a bank which is a member of the Federal Reserve System or insured by the Federal Deposit Insurance Corporation may be used in lieu of cash as a performance bond on sales. The letter of credit must be in effect for a period of time equal to the term of the contract, plus a sufficient time to allow for possible extension(s) and for closeout of the contract after cutting is completed.

(2) The bid bond may be transferred to the performance bond.

(3) Performance bonds are calculated to be 25% of the appraised value of the timber sale, rounded to the nearest \$10.00. For timber sales with performance bonds calculated to be less than \$500.00, the performance bond shall be \$500.00.

(4) An advance stumpage payment of \$500.00 will be made prior to any cutting. For contracts with an estimated value of less than \$500.00, the purchaser shall pay the amount of the estimated sale value. The advance stumpage will be applied to the first scaling invoice(s).

505.3.8 Contract Provisions

All timber sale contracts will be on the form approved by the committee and all provisions therein shall apply. A copy of the timber sale map will be attached and become a part of the contract. The timber sale contract and 'Harvest Regulations' will comply with Wisconsin BMP's For Water Quality (WDNR, Bureau of Forestry, Pub. FR093).

505.3.8(a) Slash Disposal, Landings and Decking

The objective is to control conditions that affect the following:
fire, insects, disease, aesthetics, regeneration, wetlands, wildlife and public interest. Each timber sale contract will have specific slash disposal instructions and aesthetic safeguards and will include without limit the following:

- (a) All slash must be reduced to a maximum specified height: no trees, tops or limbs shall be leaning or hanging in standing timber.
- (b) No machinery may be operated in lakes or streams.
- (c) No slash may be deposited in lakes or streams pursuant to s. 26.12(6), Wis. Stats.
- (d) No slash, logging debris or machinery operation outside the sale boundary unless approved by the County.
- (e) Landings and decks are not allowed within 100 feet of any public road except by proper authorization from the County.

(f) Any debris or material not natural to the land shall be properly disposed of as it is generated.

(g) All slash disposal, road or landing areas, and other woods operations shall be conducted in compliance with state regulations, the Vilas County General Zoning Ordinance, and the Vilas County Shoreland Zoning Ordinance.

505.3.8(b) Duration and Extension of Contracts

(a) All contracts will be issued for not less than six months nor more than 4 years. Contracts will be dated to expire on the anniversary of the sale. Exceptions may be made in cases of extenuating circumstances.

(b) An extension of time may be granted by the committee, with an appropriate adjustment in stumpage rates, at the request of the purchaser. The adjustment in stumpage rates is determined by the following rate increase schedule. No extensions will be given beyond 4 years.

One year contracts: 5% 1st extension

10% 2nd extension

15% 3rd extension

Two year contracts: 10% 1st extension

15% 2nd extension

Three year contracts: 15% 1st extension

Four year contracts: No extension

(c) The maximum time duration of a timber sale contract, including extensions, shall be 4 years. Extension beyond this period of time shall be considered by the Committee only in the event of special justification. Special stumpage rate adjustments may be made.

(d) If purchasers request to be released from contracts or do not wish to have contracts renewed or extended, the Committee may retain that part of the performance deposit equal to the difference of the stumpage values after the tract is resold plus the cost of re-establishment of the timber sale.

(e) The contractor may request a contract release due to severe physical

311 disability. The committee shall determine whether or not a release shall
312 be granted and may withhold all or a portion of the bond deposit for
313 damages.

314
315 505.3.8(c) Contract Violations

316 Field enforcement of timber sale contracts will be the responsibility of the
317 administrator employing the following procedure:

- 318 (a) The administrator, or designee, will attempt to resolve inadvertent or
319 minor violations by verbal contact with the contractor.
- 320 (b) The administrator, or designee, may immediately suspend logging
321 operations when a serious or emergency situation arises.
- 322 (c) The suspension will be followed by written notice to the contractor,
323 stating the nature of the violation and informing them of committee
324 action taken or pending.
- 325 (d) The Committee, in consultation with legal counsel, may consider, but is
326 not limited to the following remedies:
- 327 (1) Charge up to double the average mill price
- 328 (2) Charge for actual damages
- 329 (3) Suspend contract
- 330 (4) Retain all deposits
- 331 (5) Foreclose on cut forest products on sale
- 332 (6) Refer to District Attorney for prosecution
- 333 (7) Seek civil damages in addition to the performance bond.
- 334 (e) Suspension of operation will remain in effect until receipt of written
335 notice from the county.
- 336 (f) Failure of the contractor to comply with the committee decision may
337 result in cancellation of timber contracts with the county. All deposits
338 may be retained, and forest products on sale areas may be seized and sold
339 by the county. At the Committee's discretion, the contractor may be
340 banned from future purchase of county timber sales.
- 341

342
343 505.3.9 Timber Sale Restrictions

- 344 (1) To minimize resource damage, the types of logging equipment, methods,
345 and times of operation used on sale areas will be restricted by the county.
346 (2) Special restrictions may be required in accordance with the aesthetic
347 policy set forth in Section 520.
348 (3) Seasonal restrictions may be applied to protect roads, minimize recreation
349 use conflicts, benefit wildlife management, avoid endangered resources
350 concerns, minimize insect and disease problems, or to assist in fire
351 protection.

352
353 505.3.10 Special Forest Product Contracts

- 354 (1) Stumpage of fuelwood, Christmas trees, boughs, posts and poles and
355 other special forest products for resale will be handled as a regular timber
356 sale.
357 (2) Permits for commercial cutting of boughs will be issued on a first come-
358 first serve basis.

359
360 505.3.11 Timber Sale Roads

- 361 (1) The County will assist the contractor in securing legal access to sale areas
362 across private or other non-county ownership.
363 (2) The contractor will be responsible for securing permission to conduct
364 logging activities within town, county or state road rights-of-way (e.g.
365 decking, skidding)
366 (3) Forestry personnel will approve the lay-out of all roads and make other
367 necessary special provisions within the sale contract.
368 (4) Skidding, decking, or other logging activity is not allowed on County
369 Forest roads or ditches unless approved by the County Forest
370 administrator. These areas will be kept free from logging debris. County
371 forest access roads will be maintained by the logger and be left in good as
372 original condition at the close of the sale. Roads will be inspected by

373 county personnel to insure minimal resource damage and compliance
374 with Wisconsin BMP's For Water Quality.

- 375 (5) A timber sale purchaser may request permission to gate a timber sale
376 access road. The administrator may grant a gate permit to prohibit
377 only motorized traffic.

378
379 505.3.12 Supervising Sales

380 Sale inspections will be performed periodically by county and / or state personnel
381 with corresponding notations in the sales record.

382
383 505.3.13 Forest Products Accountability

384
385 505.3.13(a) Scaling Merchantability

- 386 (1) Logs and poles will be scaled by the Scribner Decimal C log rule. A log
387 is defined as 10" diameter inside bark (d.i.b.) at least 8' in length for
388 softwood, and 10" (d.i.b.) small end at least 8' in length for hardwood.
389 However, products utilized as sawlogs having a small end diameter
390 smaller than the above shall be scaled as sawlogs.
- 391 (2) The standard unit of measure for cordwood is measuring 4' x 4' x 8' to
392 100" of unpeeled wood. Hand peeled wood or ring debarked wood will
393 be converted to the standard cord by adding 12.5%, and other machine
394 peeled by adding 25% to the peeled volume measured. A pulpwood tree
395 contains at least one 1- 100" stick, to a minimum top diameter as defined
396 in the contract.
- 397 (3) DNR Timber Sale handbook #2461 will be used as a guide in determining
398 the conversion rates for posts, poles, bolts, chips, weight-scaled wood or
399 other types of forest products.

403 505.3.13(b) Utilization Standards

404 Utilization standards will be specified on individual contracts to provide
405 maximum utilization of all merchantable timber and will be based on the scaling
406 standards in 505.3.13(a).

407
408 505.3.13(c) Methods of Accountability

409 Wood harvested from the sale area must be accounted for, and payment made in
410 accordance with existing policy and procedure. All wood products are scaled on
411 the timber sale landings by Vilas County Forest or DNR personnel. The Forestry,
412 Recreation, & Land Committee allows for chipping operations which are scaled
413 using the Haul Permit System.

414
415 505.3.14 Special Forest Product Permits

- 416 (1) Special products for personal or community use, such as Christmas trees,
417 boughs, fence posts, and firewood will be awarded directly by issuance of
418 permit by the administrator or staff. This permit must be carried on the
419 person of the permittee when in the process of cutting and transporting
420 these products from the forest. Examples of Firewood Gathering,
421 Christmas Tree Cutting, and Bough Cutting Permits are found in Chapter
422 900.
- 423 (2) Permits for firewood and individual trees for removal from the right-of-
424 way or other areas designated by the Committee may be granted with or
425 without cost.
- 426 (3) Permit fees for harvest of Christmas trees will be determined by the
427 Committee. Currently the fee is \$5.00/tree.
- 428 (4) An annual summary report of cut products sold by permit will be filed
429 with the DNR using Timber Sale Notice and Cutting Report (Form
430 2460–1).

505.4 NATURAL REGENERATION

Where feasible, natural regeneration will be encouraged through the use of silvicultural methods or cultural activities including, but not limited to, clearcuts, shelterwood cuts, strip cuts, scarification, prescribed burning, select cuts and seed tree cuts. These practices can be enhanced by additional treatments, including the cutting of non-merchantable trees following harvest, by scarification before or after cutting for natural seeding, by prescribed burning, and by chemical treatment. These treatments can be used alone or in combination, depending on the needs of the site. The Silvicultural & Aesthetics Hbk. (DNR Hbk. #2431.5) shall be used as a reference in determining timing, techniques and adequacy of both natural and artificial regeneration.

505.4.1 Removal of Non-Merchantable Residual Trees

To meet certain silvicultural objectives, the cutting of non-merchantable residual trees may be required as part of a timber sale contract. This requirement will normally be included in the contract when stand evaluation indicates that the density of non-merchantable trees following harvest is likely to inhibit the growth of desirable shade intolerant tree species. Non-merchantable residual tree removal may be also done by post-sale contractor or by County crews if it cannot be done as part of the timber sale contract, and if funding and a labor source is available.

505.4.2 Prescribed Burning For Natural Regeneration

Fire is one of the most natural means available to stimulate the regrowth of early successional species. It should be employed as a management tool when possible and practical. Prescribed burning for purposes such as site preparation, slash removal, or replacement of natural fire ecology will be conducted when conditions allow. DNR Fire Control will be the major source of guidance and direction. See DNR Prescribed Burn Handbook (4360.5).

505.4.3 Other

Site preparation by other means may be considered where natural regeneration

will be aided by treatment methods.

505.5 ARTIFICIAL REGENERATION

When natural tree regeneration fails, or when tree species present do not coincide with management objectives for the site, then artificial means shall be employed to establish a more appropriate stand of trees. The establishment of a forest stand through artificial means usually requires some sort of preparation of the site, followed by seeding or planting.

505.5.1 Mechanical Site Preparation

Mechanical site preparation includes the use of soil disturbance equipment such as a brush rake, disc, roller chopper, Bracke Scarifier, disk trencher and V-plow prior to tree planting or seeding. This type of equipment is used to reduce logging debris to a smaller size, to incorporate debris into the soil, to clear brush and debris from the site to facilitate planting or seeding, and to reduce competition from other vegetation.

505.5.2 Chemical Site Preparation

Herbicide application can be an effective means of controlling unwanted vegetation in order to establish seedlings or plantations. It should be used sparingly, in situations where mechanical treatment is not expected to provide the level of vegetative control needed. Chemicals will be selected and applied in strict accordance with label recommendations and requirements. Chemicals that are listed on the FSC® “Highly Hazardous Pesticide” and SFI® banned lists will not be used without proper derogation from FSC® and SFI®. The objective of herbicide use is not to kill all competing vegetation, but rather to kill or set back competing vegetation only enough to establish a reasonable stocked stand of desirable trees. Proximity to private lands, residences, highways and other public use areas must be considered in selecting both the herbicide and the means of application. Herbicides can be applied with hand- held equipment, by motorized ground based equipment or aircraft. A written record for each herbicide

application will be prepared, kept on file, and be made available to the primary applicator.

505.5.3 Prescribed Burning

Prescribed burning for site preparation can be used to reduce logging debris, clear the site, kill set back unwanted vegetation, and to release nutrients into the soil. DNR Fire Control staff will be the major source of guidance and direction for the use of fire as a tool. See DNR Prescribed Burn Handbook (4360.5).

505.5.4 Tree Planting / Seeding

Both machine and/or hand planting/seeding will be utilized to insure adequate regeneration. The selection of species will be determined according to the specific management objectives and capabilities of each site. It shall be the policy of the committee to maintain existing constructed forest openings and those natural openings greater than 1 acre and manage them for wildlife habitat rather than to plant trees in them. The majority of planting/seeding will be in harvested areas where natural regeneration is inadequate. Planting/seeding may also be employed to maintain a desirable species distribution on the forest for purposes such as aesthetics, biodiversity, and wildlife.

505.6 TIMBER STAND IMPROVEMENT.

Timber stand improvement will involve release, thinning, and pruning as the primary practices during this plan period. Timber stand improvement includes any practices that increase the health, growth and quality of existing stands of trees. It can include activities such as release of desirable trees from vegetative competition, non-commercial thinnings of dense tree stands and pruning of lower tree branches. Some practices can be done either by hand, mechanically, or chemically. All practices and applications may be employed during this plan period.

527 505.6.1 Release

528 Release work, if it cannot be done by commercial timber harvest, will be
529 conducted by either mechanical or chemical means as site or environmental
530 conditions warrant. Release is defined as the removal of competing vegetation
531 from the desired tree species.

532
533 505.6.2 Non-Commercial Thinning

534 Most thinning can be accomplished through commercial harvest operations. Non-
535 commercial thinning will be considered if the individual site requirements,
536 funding and/or available labor make it desirable.

537
538 505.6.3 Pruning

539 Pruning will be considered mainly for conifer species and carried out when
540 deemed economically feasible.

541
542 510 **RECREATION**

543 The County Forest Ordinance and §28.11, Wis. Stats. authorize the Forestry,
544 Recreation, & Land Committee to provide recreational opportunities for the
545 public. This authority is further recognized in the mission statement for the Vilas
546 County Forest (Chapter100) which specifically identifies outdoor recreation
547 opportunities. The mission statement also charges the Committee to conduct
548 activities in a manner that prevents or minimizes the degradation of natural
549 resources.

550 (1) The Committee may establish and maintain recreation areas and
551 facilities within and outside of the County Forest. The Committee
552 has been empowered to establish and enforce rules and regulations
553 for the use of such developments and to establish fees for their use.

554 (2) The County Outdoor Recreation Plan, updated approximately every
555 five years, will reflect the public use and interest in the county's
556 recreation facilities and how the county plans to accommodate
557 those uses and interests.

(3) The Vilas County General Code and ordinances shall govern the lands designated by the county for park and recreational purposes.

(4) The county recreation map and the ordinances are appended in Chapter 900.

510.1 RECREATIONAL SERVICE AGREEMENTS

It is permissible for the Committee to contract with clubs or individuals to provide recreational services for the public. An agreement with a local snowmobile club to assist in grooming and maintaining county snowmobile trail facilities is an example.

510.2 RECREATIONAL USE PERMITS.

(1) Permits or use agreements for use of the County Forest may be issued by the Committee for recreational purposes.

(2) No permits for sale of malt or intoxicating beverages will be issued on the County Forest.

(3) Other types of special use permits are found in Section 515.

(4) Permits will not be issued for cabin sites on the forest.

(5) Organized events or special uses, other than informal recreation (see Sec. 510.4) require specific permission from the Committee.

510.3 ENTRANCE AND USER FEES

(1) Fees for camping shall be in accord with fees charged by similar private facilities so as not to provide undue competition. Fees shall be subject to change periodically at the discretion of the Committee.

(2) Detailed information on park or recreation area use regulations can be found in the Vilas County Outdoor Recreation Ordinance.

510.4 EXTENSIVE RECREATIONAL USE OF THE FOREST

Extensive (informal) County Forest uses shall include, but not necessarily be limited to, hunting, fishing, picnicking, snowshoeing, biking, hiking, cross-

country skiing, photography and nature study. Such uses do not require a permit but must be conducted according to the provisions of County Ordinances.

510.4.1 Hunting

The entire county forest is open for regulated hunting with the exception of designated areas that are developed for high public use, such as Torch Lake Park. Temporary hunting stands are permissible but must be removed from the forest after use. The use of nails, lag screws, screw steps, or other damaging devices is not permitted. No permanent type structures shall be permitted. Refer to Chapter 900 for the ordinance pertaining to tree stands.

510.4.2 Fishing

All lakes and streams within the forest are available for regulated fishing, unless otherwise listed in state and county regulations.

510.4.3 Picnicking

Picnicking is allowed throughout the County Forest; however, the user must remove any garbage or debris generated. Violators will be subject to fines for littering.

510.4.4 Camping

A permit is required to camp in designated recreation areas, such as the Wisconsin River Canoe Campsites and Tamarack Springs Campground. Camping on the Vilas County Forest in areas other than the developed campsites is permitted for the traditional Wisconsin Gun Deer Season.

- (1) No littering or site destruction will be tolerated.
- (2) The Forestry, Recreation, & Land Committee will set the permit fee.
- (3) Maximum permit period is 10 days.
- (4) Natural vegetation and terrain may not be damaged or altered in any way, except for the construction of an adequate fire ring. Fasteners such as nails, screws or bolts may not be attached to trees.

- (5) Manufactured materials (lumber, concrete, plastics, etc.) may not be left on the site when it is vacated. No trees or other vegetation, either native or exotic, may be planted on the site.

510.5 INTENSIVE RECREATION AREAS.

The Vilas County Forest has sites developed to accommodate a high degree of public use. The Forestry, Recreation, & Land Committee may prohibit other recreation activities that are not compatible with the intent of the developed facilities.

510.5.1 Campgrounds

Designated camping areas are provided on the County Forest. These facilities include:

1. Tamarack Springs Campground
2. Wisconsin River Canoe Campsites (2)
3. River Road Equestrian and Torch Lake RV Campgrounds

510.5.2 Picnic Areas

Picnic areas open to the public include:

1. Torch Lake
2. Hunter Lake
3. Eagle Lake
4. McLeod Lake
5. Snipe Lake
6. Snyder Lake
7. Rummels Road
8. River Road
9. Buckatabon Trail

510.5.3 Swimming Areas

Designated swimming areas include:

1. Torch Lake

651 2. Hunter Lake

652 3. Eagle Lake

653 Lifeguards are not provided at these areas.

654
655 510.5.4 Boat Landings

656 At several locations in the county, on and off the County Forest, areas have been
657 developed for water access. These generally include a parking lot, surfaced
658 approach to the water (boat landing), and appropriate signing. These are provided
659 for public access to waters for recreational purposes and are shown on the
660 recreation map in Chapter 900. Water access is also addressed in Chapter 700.
661 These landings are not to be considered boat-mooring sites.

662
663 510.5.5 Waysides

664 Waysides are day use areas and are located at various points throughout the
665 County. Currently there are no waysides maintained by the Vilas County Forestry,
666 Recreation, & Land Department.

667
668 510.5.6 Shooting Ranges

669 There is one gun range on the County Forest designated as a Special Use Area.
670 Maintenance and repair of this facility is done by Department staff.

671
672 510.6 MANAGED TRAIL AREAS

673 Whenever possible, multiple uses of the various trail systems are encouraged and
674 are subject to policy review of the Committee. Whenever possible, user conflicts
675 are avoided. However, recreational users will frequently encounter forest
676 management activities instrumental to the existence and future of the Vilas
677 County Forest. The trail systems are identified in the Recreation map appended in
678 Chapter 900 and referenced in Chapter 700.

679
680 510.6.1 Motorized Trail Opportunities

681 Motorized recreational trails can be a legitimate use of the Vilas County Forest,

provided these trails are designed and maintained in a manner that minimizes damage to the environment and reduces user conflict. Trail use and development must be compatible and sustainable with the characteristics of the landscape. It is the policy of the Committee to consider opportunities which provide adequate public trails on the forest for motorized recreation. The use of ‘Off Road Vehicles’ on the Vilas County Forest is prohibited by Vilas County Ordinance, Chapter 16.06(8)(d) except where specifically approved by the Vilas County Forestry, Recreation, and Land Committee. The Forestry, Recreation, and Land Department will coordinate and administer the county-wide snowmobile trail, all/utility terrain vehicles (ATV/UTV), and Off Highway motorcycle (OHM) programs under §23.09(11), §23.09(26), §23.35, §23.335 and §350.12(4), Wis. Stats., and NR §50, Natural Resources Code, and the Vilas County Outdoor Recreation Ordinance. A maintenance program will occur, utilizing as much cost-sharing as possible from the DNR. Refer to Chapter 700 for further discussion on motorized recreation opportunities on the Vilas County Forest.

510.6.2 Non-Motorized Trail Opportunities

The Vilas County Forest is a multiple-use forest. Non-motorized travel on trails is a legitimate use of this forest. Design and maintenance of these trails may highlight natural features present on the Forest, should minimize damage to the environment and reduce user conflict. Trail use and development must be compatible and sustainable with the characteristics of the landscape.

510.7 FACILITIES FOR PEOPLE WITH DISABILITIES

Vilas County will comply with the Americans with Disabilities Act regulations. In addition, it is the policy of the Committee to provide recreational opportunities for people with disabilities. A disabled hunter access trail has been developed which provides 1.5 miles of vehicle access and 4 miles of seeded habitat trails.

515 SPECIAL USES

(1) Recognizing the vast potential for a variety of special uses of the County

Forest by governmental units, businesses, organizations or individuals, the committee may designate specified areas for special uses. Specific management methods are to be considered on these areas. Uses must be consistent with the intent of the County Forest Law.

(2) All requests for specialized uses of any County Forest lands will require a permit authorized by the Committee.

(3) An agreement has been entered into with the Federal Aviation Agency for the placement and maintenance of a radar tower located in the SESW, Sec. 2, T41N – R9E.

515.1 SAND AND GRAVEL

Wisconsin Act 464 sets forth the regulations that affect gravel/borrow pits on all lands within the State. Sand and gravel pits located on the County Forest may be used only by units of government or contractors performing public works. Use of existing pits and the opening of new pits by other than the County Forestry Department will require Committee approval and be authorized by permit only. The condition of such permits may include but not be limited to:

- 1) requiring the pit and its access road to be screened from view from any public highway,
- 2) severing trees from the stump,
- 3) disposition of brush and dirt spoil by leveling or hauling away,
- 4) sloping to prevent steep banks, and
- 5) filing with the forestry office an annual written report of gravel and sand removed.

Other conditions may be set at the discretion of the Committee. The Committee may set fees for materials removed. Other non- metalliferous materials will be dealt with on an individual basis.

All active, nonmetallic sites greater than one acre in size, including those on the County Forest, are also subject to the provisions of the Nonmetallic Mining Reclamation Program, Chapter NR 135, Wis. Adm. Code. The County Forestry Department shall work with the local permit coordinator (often county or local

zoning office) in obtaining the necessary permits for nonmetallic mining operations.

Sand and gravel may, under some circumstances, be leased to private contractors for private use. In these situations the land must be withdrawn from the County Forest Law until sand/gravel removal and reclamation of the site is completed. Upon completion of reclamation to the satisfaction of the county and the state, the lands shall be reapplied for entry under the County Forest Law. Currently there are 3 gravel pits operated under an agreement with the County Highway Department and 1 gravel pit operated by the Forestry Department.

515.2 EXPLORATION, PROSPECTING AND MINING

- (1) The committee may investigate all mineral exploration, prospecting and mining requests as they are received.
- (2) The DNR shall be notified of all requests as they become known in accord with Manual Code 2712.1. (Mineral exploration on County Forests per §28.11 (3)(i) Wis. Stats.) or other codes which may be subsequently adopted. Public Forest Lands Handbook should be referenced for more detailed procedure.

515.3 SANITARY LANDFILLS.

The use of County Forest lands for sanitary landfills will not be allowed unless the lands involved are withdrawn from the County Forest Law. In February, 2000 an area of 93.53 acres was withdrawn from the County Forest Law to support the Vilas County Landfill. As a condition of the withdrawal, Vilas County shall apply for entry of this same area when the useful life of the Landfill is terminated and the area has been reclaimed.

515.4 MILITARY MANEUVERS

Military maneuvers on County Forest lands will be considered under a lease or written land use agreement. Upon receipt of a written request from the military the Committee, other necessary County staff, Military, and D.N.R. representatives

will discuss the issue at a public Committee meeting. After the needs have been outlined, the site shall be field checked, D.N.R. input and consistency with the County Forest Law sought, and town officials advised. Depending on the scope of the project, a public hearing may be appropriate. If all aspects and concerns are addressed and agreed to, a legal instrument will be drafted. The matter will then be brought back to a Committee meeting for final input and approval. The Public Forest Lands Handbook #2460.5, Chapter 270 will be used for further direction in this matter.

515.5 PUBLIC UTILITIES.

Easements for public utilities will be considered by the Committee. Underground installations will be encouraged. The following main provisions shall be included in any County Board resolution granting permission for construction of any utility transmission line:

1. Utility may be billed for merchantable forest products and existing timber reproduction.
2. Utility may be billed for land removed from production due to right-of-way clearing for losses of future income and multiple use benefits.
3. Land removed for utility operations that is no longer suited 'primarily for timber production or that is no longer suitable for scenic, outdoor recreation, public hunting & fishing, water conservation or multiple use purposes' (§28.11(4)(c), Wis. Stats.) may need to be withdrawn for county forest law designation. The utility shall replace any lands requiring withdrawal from county forest with other lands suitable for county forest entry that are in the forest blocking of the County Forest.
4. Utility companies will be encouraged to use existing corridors and underground lines to minimize disturbance to the county forest and native plants and animals.
5. Merchantable timber will be removed in a manner approved by the Committee. Timber cut must be reported to the DNR on form 2460-1.
6. Utility must provide notice of proposed route, including a map of not less

than 1 inch/mile scale, 90 days in advance of proposed construction.

7. Special maintenance, controlled access and signage concerns shall be addressed in any proposal.

8. The fee for such a land use agreement is set at \$1.00 per lineal foot for each utility with a minimum fee of \$250.00.

9. The Vilas County Corporation Counsel shall review all easements.

515.6 PRIVATE UTILITY SERVICE LINES

If a landowner cannot gain utility access across other lands, the committee may consider a land use agreement for access across County Forest. Requests will be considered on a case by case basis. These agreements should consider the inclusions mentioned in Section 515 for easements as well as:

1. The permit is non-transferrable
2. The County retains full ownership of the utility corridor, however it shall not be liable for maintenance, upkeep, or other damages associated with the utility service.
3. The permittee waives any rights to any declaration of ownership or interest in the utility corridor on County land for administrative costs as a result of this Land Use Agreement – Utility permit. This agreement is granted upon the signature and any fees being received by Vilas County.
4. The fee for such a land use agreement is set at \$250.00 for each utility.
5. Burial of utility lines is preferred. Above ground structures will be responsibility of permittee, including maintenance, disassembly, and removal.
6. The standard land use agreement for utility access is included as an exhibit in Chapter 900.

515.7 CELLULAR COMMUNICATION TOWERS

The placement of cellular communication towers on the Vilas County Forest will be considered by the Committee on a limited basis. Requests will be considered on a case by case basis subject to the following conditions:

1. It must be demonstrated the site is the most practical location for the tower
2. Land selected for such a tower is no longer suitable for continued entry in the County Forest program. In addition, any accompanying lands needed for tower support wires that inhibit the practice of forestry and are no longer suitable for scenic, outdoor recreation, hunting & fishing, water conservation or multiple use purposes (§28.11(4), Wis. Stats) may also need to be withdrawn from county forest law. Withdrawal is subject to approval by both County Board and DNR. The cellular communication company shall replace any lands requiring withdrawal from county forest with other lands suitable for county forest entry that are in the forest block.
3. Vilas County shall consider free use of such tower.
4. Any agreement should also consider the inclusions listed under 515.5 (Items 1-7).
5. The County Corporation Counsel shall review any agreements, leases, or easements for communication facilities.

515.8 OTHER

Other types of special uses of the county forest may be considered by the committee. These may include, but are not limited to: research, independent study and scientific areas. Regulations governing these uses will be developed on an individual basis.

520 AESTHETIC MANAGEMENT ZONES

Aesthetic forest management will be applied to the County Forest. The degree of application of special management will vary and will require the classification of the forest according to the degree and type of public use. The Wisconsin DNR Silvicultural and Forest Aesthetics Handbook No. 2431.5, and the Natural Resources Board Policy on management of State and County Forests contained in Chapter NR 1.24 of the Wis. Administrative Code (as adopted in June of 1989) will be used for management prescription guidelines. Subsequent versions of NR 1.24 are subject to the approval of the County. Scenic Management Zones are

shown on the land use map appended to in Chapter 900.14.

520.1 AESTHETIC MANAGEMENT ZONE A

Zone A includes areas where there is intensive public presence because of scenic attraction, or some use of the area that would be enhanced by special timber management practices.

520.1.1 Examples – Zone A

- (1) Park and recreation areas, including access routes.
- (2) Lakes and rivers that support significant water based recreational activity.
- (3) Roads with medium to heavy use where the majority of the traffic is unrelated to the forest or is for the specific purpose of enjoying scenery.

520.1.2 Boundaries – Zone A

1. Park or recreation areas. Zone boundaries may include the area within the reasonable visible horizon as determined from any location within the recreation area. It may also include adjacent areas that receive a considerable amount of use as a result of the recreation area.
2. Travel corridors. The boundaries will be a reasonable distance from the traveled part of the zone.

520.1.3 Management – Zone A

Zone A management is primarily for scenic values. This will mainly involve adaptations of normal timber cutting practices and may require additional expenditures.

520.1.4 Permitted Uses – Zone A

1. Timber harvesting and thinning operations may be prohibited during periods of peak public use. All slash may be lopped and/or removed from view.
2. Timber stands in this zone will be managed to afford the greatest scenic

potential for public enjoyment.

3. Borrow pits may be permitted near a road during the time the road is under construction. When any borrow operation is completed the site will be restored pursuant to Chapter NR 135, Wis. Adm. Code and must aesthetically conform to general use of the area. Permanent pits should be screened from view. Gravel/borrow pits located on the county forest may only be used by units of government or contractors performing public works.
4. County directional, informational and recreational signs conforming to approved standards are permitted.
5. All tree and shrub planting will be spaced at random to prevent an artificial appearance.
6. New access roads will be permitted if they join the main road at right angles... All such access roads will be, when possible, curved so that no cleared line of sight will be created from the main road to the exterior boundary of the zone.

520.2 AESTHETIC MANAGEMENT ZONE B

Zone B includes any area of the forest where the public use is such that no one value can at all times be considered as the most important, but where, because of the intensity and variety of use, scenic attractiveness is desirable.

520.2.1 Examples – Zone B

1. Roads with light to medium use where the majority of the traffic is a result of some other use of the forest other than for scenic beauty.
2. Lakes or streams that do not have significant value for water-based recreation.

520.2.2 Boundaries – Zone B

The zone boundaries will have a reasonable visual horizon determined at periods of heavy use, from the part of the zone where the use occurs.

520.2.3 Management – Zone B

Zone B Management is for normal multiple use, but applies strict slash disposal requirements for any management operations. With the use of informational signs, management practices may be interpreted to the public.

520.2.4 Permitted Uses – Zone B

All land management activities are permissible but should be exercised with sensitivity to aesthetics. Examples: Timber sales may employ logging and scattering of slash, rehabilitation of roads and landings, erosion control and prevention, and irregular harvest lines to mitigate aesthetic impact.

520.3 AESTHETIC MANAGEMENT ZONE C

Zone C includes all parts of the forest not contained in Zones A, B or D. Any significant public presence in this zone is likely to occur only as result of a specific use of the forest.

520.3.1 Examples – Zone C

All areas not included in Zone A, B or D. The majority of the forest is normally classified as Zone C.

520.3.2 Boundaries – Zone C

All areas not included in Zone A, B or D.

520.3.3 Management – Zone C

Zone C management is to optimize timber production using sound resource management concepts. Natural opportunities to maintain or enhance diversity or scenic quality should be considered.

520.3.4 Permitted Uses – Zone C

All land management activities consistent with the goals of the forest.

520.4 AESTHETIC MANAGEMENT ZONE D

Areas designated as special resources.

520.4.1 Examples – Zone D

(1) Spruce Grouse Management Area

(2) Mickey’s Mud Lake

520.4.2 Management – Zone D

Manage these areas as outlined in Chapter 800 or the individual management Plan.

525 **TREATY RIGHTS: GATHERING MISCELLANEOUS FOREST PRODUCTS**

Ordinance No. 16.09, adopted by the County Board of Supervisors of the County of Vilas on 8 January, 1992, authorizes Vilas County to require permits for gathering miscellaneous forest products on County land by Native American treaty rights participants. The ordinance, Section 16.09 of the General Code of Vilas County, adopts language of, and complies with, the Federal District Court decision and states as follows: 16.09(1) Permit Required – Any treaty rights participant as covered in the decision dated 19 March 1991, in case number 74-C-313-C, the Honorable Barbara B. Crabb, District Judge for the Federal District Court for the Western District of Wisconsin, interested in gathering other miscellaneous forest products (except fruits, seeds, or berries not enumerated in County Ordinances), from county owned land shall obtain a County Gathering Permit from the County Forestry Office prior to the exercise of said gathering rights.

16.09(2) Application and Processing – The County Forest Administrator shall prepare an appropriate application requesting pertinent information from all treaty rights participants who seek to gather miscellaneous forest products on county forest lands. Said application shall be available upon request. Those treaty rights participants who seek to gather miscellaneous forest products shall provide proper identification, and present a valid tribal membership card upon submitting an application with the county. Upon receipt of an application, the county shall respond to the gathering permit request no later than 14 days after receipt of said application. Said response shall either grant or deny the

request. Should the request be denied, the reasons for said denial shall be set forth in the response from the county, including basis for said denial with specific reference to the limitations set forth in Section 16.09(4). Any application which is incompletely or incorrectly prepared shall be returned within said 14 days to the applicant with specific directions as to which portion(s) of said application is/are defective.

16.09(3) Rights Granted By Said Permit – The gathering permit shall indicate the location of the material to be gathered, the volume of the material to be gathered, and any additional conditions on the gathering of the material necessary for conservation of timber or miscellaneous forest products on county land, or for public health and safety. A sample Application & Permit for the gathering of miscellaneous forest products under treaty rights may be found in Chapter 900.

16.09(4) Denial of Gathering Permit – The county may not deny a request to gather miscellaneous forest products on county property under the terms of this ordinance unless: 16.09(4)(a) The gathering is inconsistent with the forest management for said property; 16.09(4)(b) The gathering will conflict with pre-existing rights of a permittee or other person possessing an approval to conduct an activity on the property, including a contractor of the county; 16.09(4)(c) Is otherwise inconsistent with conservation or public health or safety.

530 EXCEPTIONAL RESOURCES

Exceptional resources include natural communities, areas, or sites that possess unique qualities locally, regionally, or nationally. Also included are species that are rare, threatened, endangered, or identified as species of greatest conservation need. It is the policy of Vilas County to manage these resources to sustain and enhance their exceptional features or populations.

530.1 COMMUNITIES OF SIGNIFICANT VALUE TO BIODIVERSITY

Although communities are not legally protected, they are critical components of Wisconsin's biodiversity and may provide habitat for rare, threatened, and endangered species. A list of natural community types found in the Northern Highland Ecological Landscape and in Vilas County is appended in Chapter 900.

1023 Additionally, a list of these communities occurring on the Vilas County Forest is
1024 also included in Chapter 800. The presence of these communities provide
1025 opportunity for examples to be maintained.

1026 1027 530.1.1 Haymeadow Creek Swamp

1028 An area identified as an exceptional and unique resource is the Haymeadow Creek
1029 Swamp. This site is found primarily in Sections 13, 14, 23, 24, 25, and 26 of
1030 Land O'Lakes Township. The biological site is partially on county land, and
1031 partially on state, federal, and Board of Commissioners of Public Lands property.
1032 Several natural communities of high conservation value are found in this native
1033 community complex—northern dry forest, Tamarack swamp, northern wet forest,
1034 northern sedge meadow, Alder thicket, and slow, hard, cold streams. Eight
1035 endangered, threatened, and special concern species have been identified from the
1036 site. In addition, the site has been nominated as an important bird area for its
1037 abundance of boreal birds, especially Spruce Grouse.

1038 1039 530.1.2 Northern White Cedar (*Thuja occidentalis*)

1040 The Vilas County Forest has 55 acres typed as stands of Northern White Cedar.
1041 The age of these stands range from 103 to 150 years. With regard to the
1042 difficulties in regenerating Cedar, due mostly to high deer populations, these
1043 stands are currently not being harvested, with the exception of salvage harvests of
1044 dead or dying trees. However, silvicultural techniques used in conjunction with
1045 repellents, fencing, and/or bud-capping may prove useful in regenerating Cedar
1046 and enhancing its presence on the County Forest.

1047 1048 530.1.3 Eastern Hemlock (*Tsuga Canadensis*)

1049 On the Vilas County Forest, Eastern Hemlock occurs incidentally in northern
1050 hardwood stands as individual trees and small islands of trees. There are no
1051 stands of Eastern Hemlock on the County Forest. Hemlock is important to the
1052 diversity of our northern hardwood stands and provides needed habitat for many
1053 species including migratory songbirds and a seed source for regeneration.

Management is currently keyed to maintaining Hemlock as a component of northern hardwood stands and improving the health and vigor of individual trees and islands of trees through thinning. Regeneration is dependent on overcoming high deer populations by use of the same techniques as previously discussed with Cedar.

530.1.4 Natural Origin Red & White Pine Stands (*Pinus resinosa*) (*Pinus strobus*)

Unique to the Vilas County Forest are Red and White Pine stands of natural origin. These stands occupy 2,911 acres on the County Forest and range in age from 90 – 108 years. Age and size class diversity on the County Forest are provided by these stands as their understories have developed through periodic thinnings. Management activities in these stands are determined on an individual stand basis as scheduled activities come due. Stand characteristics are considered so that when it is prudent, stands are managed to the biological maturity for that particular site.

530.1.5 Wild Rice & Wild Celery Lakes & Streams

Appended in Chapter 900 is a list of Vilas County lakes and streams known to contain wild rice and wild celery. The management goal for those waters within the County Forest is to protect and sustain these resources. The Forestry Department in cooperation with WDNR has, and will continue, to enhance these communities through planting and beaver control as funding and labor sources permit.

530.2 RARE, THREATENED, OR ENDANGERED SPECIES & ECOSYSTEMS

The Natural Heritage Inventory is a database of rare, threatened, and endangered species and natural communities throughout Wisconsin. Chapter 800 provides a list of species and communities occurring in Vilas County and on the Vilas County Forest. Management of the County Forest will consider these species and habitats, as well as those identified as Species of Greatest Conservation

Need (listed in Chapter 800), and alter management practices to mitigate impacts. Forestry Department staff will work with DNR Endangered Resources staff to coordinate monitoring, research, and educational activities.

530.2.1 Spruce Grouse Management Area

The Vilas County Forestry Department, in cooperation with the Eagle River Ranger District of the Nicolet National Forest and the Wisconsin DNR, supports a Spruce Grouse Management Area. The Spruce Grouse (*Dendragapus Canadensis*) is considered a rule protected rare species in Wisconsin. The goal of this cooperative management area is to maintain and promote the existing Spruce Grouse populations in the area. Also, part of the area contains a small, patterned peatland community, comprised of wetlands with scattered islands of mixed conifers throughout.

The management area location lies between County Highway E and Highway K including lands in the drainages of the Wisconsin River, Haymeadow Creek, and Muskrat Creek. More specifically, Vilas County Lands in Forest Compartments 35 & 36 in Sections 13, 14, 23, 24, 25, 26, and 27, T42N – R10E.

Spruce Grouse habitat will be enhanced by promoting the maintenance of Jack Pine and Black Spruce cover types and emphasizing age class diversity. Signs explaining the identification of Spruce Grouse and their management have been erected to inform the public.

530.3 CULTURALLY SIGNIFICANT SITES

The State Historical Society provides information on documented sites of cultural significance. There are known sites significant to the history and culture of Native Americans. This area is protected by eliminating activity that would disturb the soil or vegetation.

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600 PROTECTION

OBJECTIVE

To protect and manage the resources of the forest from preventable losses resulting from fire, insects, diseases and other destructive elements including those caused by people. Protective methods shall include proper silvicultural methods.

605 FIRE CONTROL

Damage to the forest caused by uncontrolled fire can create an important challenge in the management of the forest. Loss of resource values caused by fire will be minimized through organized prevention, detection and suppression methods. Maintaining a healthy forest is key to the management of wildfires. The DNR is responsible for all matters relating to the prevention, detection and suppression of forest fires outside the limits of incorporated villages and cities. (§26.11(1), Wis. Stats). The DNR works cooperatively with local fire departments in all fire control efforts. The Vilas County Forest is part of the intensive Forest Fire protection area. The Fire Prevention Handbook No. 4310.5, Prescribed Burn Handbook No. 4360.5, the Fire Management Handbook No. 4325.1 and the Area Fire Plan shall serve as the guidelines for fire control activities.

605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES

Pursuant to §26.11(4) and §28.11(4)(f), Wis. Stats., and of the Vilas County Forest Ordinance, the county may cooperate with the DNR in the interest of fire prevention, detection and suppression on the County Forest. This is accomplished through agreements authorizing the DNR to use County Forest land or to utilize county personnel and equipment for fire protection activities.

605.1.1 Personnel

County Forest personnel, upon request from the DNR, may be made available for forest fire control efforts within the county. The DNR is responsible for training and directing the activities of county personnel in accordance with the rules identified in the Area Fire Action Plan.

72 **605.1.2 Equipment**

73 County Forest equipment may be available for forest fire control suppression. During
74 periods of high fire hazard, all County Forest vehicles and/or crews should be equipped
75 with one or more back pack cans, axes or shovels, appropriate personal protective
76 equipment, mobile communication and any other equipment deemed essential. All hand
77 tools shall be maintained and provided by the DNR.

78
79 **605.1.3 Fire Detection**

80 Fire detection is the responsibility of the DNR. County Forestry personnel shall assist and
81 report any wild fires to the DNR, local Fire Department or 911 Dispatch. The Monahan
82 Fire Tower is located on private land within the County Forest Boundary.

83
84 **605.1.4 Forest Fire Prevention**

85 DNR fire control personnel are authorized by the county to place fire prevention signs at
86 recreational areas and other strategic locations within the forest. The County conducts and
87 controls all operations (including harvesting) on the forest in a manner designed to prevent
88 forest fires. The use of the county forest during high fire danger periods may be restricted.
89 These restrictions will include, but not be limited to, recreation and logging.

90
91 **605.2 SLASH DISPOSAL**

92 Timber sale contracts will be designed to meet or exceed the requirements of the Slash
93 Disposal Law, §26.12, Wis. Stats. Additional requirements may be imposed as necessary.

94
95 **605.3 DEBRIS BURNING**

96 Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to
97 §26.12(5), Wis. Stats.

98
99 **605.4 CAMP FIRES**

100 Adequate fireplaces will be provided at designated recreation sites. During periods of high
101 fire danger, use of campfires may be restricted.

605.5 PRESCRIBED BURNING

All prescribed burning on County Forest lands will follow the DNR recommendations. See Prescribed Burn Handbook No. 4360.5 for details. Prescribed fire may be an effective management tool on the County Forest.

605.6 COUNTY FOREST FIRE HAZARD AREAS

Primary emphasis will be placed on fire control efforts in pine areas. Maps of these areas are available at the local DNR field office (Fire Management Handbook. #4325.1, Section 3030). The County will cooperate with DNR Fire Control in providing for firebreaks or access ways. Existing access roads, firebreaks and water access points will be maintained as deemed necessary. Secondary emphasis will be placed on hardwood areas with no firebreaks developed or maintained. However, access roads will be maintained as defined in Chapter 700 of this plan.

605.7 UNCONTROLLED FIRE

Any uncontrolled or non-prescribed fires on the County Forest will be suppressed as soon as possible.

610 CONTROL OF FOREST PEST & PATHOGEN

610.1 DETECTION

Damage to the forest caused by insects, other pests and diseases can adversely affect management of the forest resources. Losses to resource values impacted by forest pests will be minimized through integrated pest management methods, with emphasis on silvicultural prescriptions (timber sales). The detection and control of pest problems will be accomplished by County and DNR personnel in cooperation with other agencies.

610.2 PEST SURVEYS

Pest surveys are conducted under the direction of the DNR's regional entomologist. The DNR works in cooperation with the Wisconsin Department of Agriculture Trade and Consumer Protection (DATCP) in monitoring the spread of gypsy moths. The County may cooperate by providing personnel and equipment to assist in these operations.

610.3 INTEGRATED PEST MANAGEMENT

Integrated pest management for the purpose of this Plan, is defined as follows:

“The maintenance of destructive agents, including insects, at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.”

The integrated pest management control and methodology shall be determined jointly by the county forest administrator, and DNR liaison forester in consultation with the DNR regional entomologist and regional forester. Suppression of forest pests may include the following:

- 1) Silvicultural prescriptions, including timber sales.
- 2) Biological control.
- 3) Chemical control.

610.3.1 Specific Pests and Pathogens of Interest.

610.3.1.1 Gypsy Moth Strategy

This introduced pest has progressed westward from the northeastern United States since the early 1900's. It reached eastern Wisconsin and has been widespread in some counties since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing westerly through Wisconsin. The Vilas County Forest's strategy to combat this defoliating insect will focus on using silvicultural techniques to maintain and improve forest vigor, so as to decrease the likelihood and severity of defoliation. In addition, suppression spraying with approved insecticides may be considered in high use recreation areas and stands containing a high percentage of susceptible, high valued timber. Biological controls may also be available for introduction to help reduce outbreak frequency.

The presence or discovery of threatened or endangered species in these areas may impact both the type of treatment and the decision to apply suppression tactics. Current insecticides for gypsy moth control include a bacterial insecticide (Btk) and a commercial formulation of a natural-occurring virus (Gypchek). The Gypchek virus, specific to gypsy

moth larvae, is only available through the federal suppression program administered by the DNR. The intent in combating this insect is not to eradicate, but rather to reduce populations so that tree mortality is maintained at tolerable levels. The DNR's local gypsy moth coordinator and entomologist will be available for consultation on control tactics and possible quarantine procedures. DATCP is the agency responsible for quarantine procedures for wood products from infested counties.

Vilas County Forest's threshold levels for suppression will be as follows:

- 10 acres in size and of a compact and regular shape (minimum eligible size for aerial spraying through the state suppression program) OR high use, developed recreation areas
- 500 egg masses per acre based on 1/40th acre (18.6 ft. radius) plots

610.3.1.2 Jack Pine Budworm

Jack pine budworm, *Choristoneura pinus pinus* Freeman, is a native needle-feeding caterpillar that is generally considered the most significant pest of jack pine. Vigorous young jack pine stands are rarely damaged during outbreaks. The most vigorous stands are well stocked, evenly spaced, fairly uniform in height, and less than 45 years old. Stands older than 45 years that are growing on very sandy sites and suffering from drought or other stresses are very vulnerable to damage. Tree mortality and top-kill are more likely to occur in these stands. This mortality and top-kill create fuel for intense wildfires. It will be Vilas County's strategy to harvest at the appropriate rotation age, maintain high stand densities (without overcrowding), and use good site selection for jack pine. This will be an effort to help avoid budworm-caused tree mortality and reduce the threat of damaging wildfires while still providing suitable conditions for jack pine regeneration. Prompt salvage following an outbreak will also help reduce the possibility of wildfire. Use of insecticides is not warranted in combating this forest pest on the County Forest.

610.3.1.3 Oak Wilt

Oak wilt, *Ceratocystis fagacearum* (Bretz) Hunt, is a destructive disease of oak trees. It is responsible for the death of thousands of oak trees in forests, woodlots, and home landscapes each year. Oak wilt is caused by a fungus that invades and impairs the tree's

water conducting system, resulting in branch wilting and tree death. Trees in both the red oak group and white oak group are affected. There is no known cure once a tree has oak wilt. Prevention of new oak wilt infection centers is the best management option and involves avoiding injury to healthy trees and removing dead or diseased trees. Healthy trees should not be pruned during the growing season as this attracts beetles that may carry the oak wilt fungus. If pruning is necessary or damage is incurred during the growing season, e.g. through construction activities or storms, the wounds should be painted immediately with a wound paint.

It will be Vilas County's policy to remove infected trees and debark or chip them when located in a high intensive use area. Once chipped or debarked, the materials shall be covered with plastic for a period of six months to kill the fungus and any insects in the material. A vibratory plow, or similar implement, will also be used to sever root grafts on isolated pockets where feasible. Timber harvest of Red Oak follow generally accepted practices using Wisconsin DNR's "Oak Wilt Guide".

610.3.1.4 Forest Tent Caterpillar

Forest tent caterpillar, *Malacosoma disstria* Hubner, can be found throughout the United States and Canada wherever hardwoods grow. The favored hosts in Wisconsin are aspen and oak. This native insect causes region-wide outbreaks at intervals from 10 to 15 years; outbreaks usually last 2 - 5 years in the Lake States. Severe and repeated defoliation can lead to dieback and/or reduced growth of affected trees, which in some instances may be significant. Populations are often controlled by natural enemies, helping the population crash. Aerial spraying of insecticides can be an option for control as well. It will be Vilas County's strategy to employ sound silvicultural practices to combat this cyclic pest.

610.3.1.5 Two-lined Chestnut Borer

The two-lined chestnut borer, *Agrilus bilineatus* (Weber), is a common secondary pest in trees which have been severely defoliated several years in a row. Oaks that have been defoliated by insects such as gypsy moth (*Lymantria dispar*), fall cankerworm (*Alsophila pometaria*), and forest tent caterpillar (*Malacosoma disstria*) can be attacked and killed by the two-lined chestnut borer. Prevention of two-lined chestnut borer is the best

management option. Vilas County will strive to maintain healthy trees through sound silvicultural practices to discourage infestation. Infestations will be salvaged promptly.

610.3.1.6 Emerald Ash Borer

The emerald ash borer, *Agrilus planipennis*, was introduced from Asia and has taken hold in lower Michigan. In Michigan it has resulted in widespread mortality specific to ash including green, white, black and several horticultural varieties. Although not currently present in Wisconsin, it is a severe threat to ash in the State. Ash comprises a significant component in the northern hardwood timber type and can be found in nearly pure stands in some lowland areas. Adult beetles feed on foliage however, it is the larvae that cause mortality by feeding on the phloem and outer sapwood of the ash trees. Vilas County will cooperate with ongoing trapping and survey efforts. Sound silvicultural practices will continue to be used to maintain forest health. Should an infestation occur, Vilas County will work with DNR Forest Health staff in applying measures to minimize spread, including aggressive salvage trees.

610.3.2 Funding

Desired control activities on the County Forest will be funded through the county forestry budget if other sources of funding are not available. In the event costs require additional funding, special appropriations from the Vilas County Contingency Fund will be sought. In addition, state legislation may provide monetary assistance in direct crisis situations where major control operations are undertaken. In case of gypsy moth outbreaks, the county may seek funding from the State of Wisconsin Gypsy Moth Suppression Program.

610.3.3 Legal Obligations

All control operations will comply with regulations as set forth in existing state and federal legislation. Refer to Wisconsin Administrative Code NR80, AG.29, and the Environmental Pesticide Control Act.

610.3.4 Special Projects

The County may cooperate with other agencies in forest pest research. See Chapter 200.

615 TIMBER THEFT

All cases of alleged timber theft on the county forest shall be investigated and resolved promptly. An allegation of theft by cutting and /or removing timber from the county forest does not alleviate the county from payment under §28.11 (9) Wis. Stats. The county will collect damages pursuant to §26.05 Wis. Stats. and may also pursue criminal charges under §943.20 Wis. Stats. and /or seek civil damages.

615.1 TIMBER THEFT INVESTIGATION

The following procedure should be used in all cases of alleged timber theft:

(1) Determination of Theft

(a) Gathering facts - The County, through its sheriff's department and along with assistance of the DNR liaison, rangers and wardens, will ascertain the facts pertinent to the alleged theft, including determination of the damages to the county. Legal counsel representing the county should be involved in all aspects of investigation. Property involved in the alleged theft may be seized pursuant to §26.04 Wis. Stats. for use as evidence.

(b) Boundary determination - If property boundaries are involved, the county shall conduct a legal survey of the boundary in question.

620 ENCROACHMENTS

The county will actively investigate all suspected cases of encroachments on the County Forest. To insure the integrity and continuity of the County Forest land, all cases will be dealt with promptly and in a consistent manner. The following procedures will be used in all cases of suspected encroachments:

(1) The county will establish property boundaries; if necessary, a legal survey will be conducted.

(2) The county will gather all facts.

(3) The Committee, in consultation with the forest administrator, county legal counsel, and the DNR, will make a decision as to the disposition of the case.

(a) All above ground encroachments that are movable will be removed from county property.

(b) Permanent type facilities, such as homes, garages, and septic systems

shall be addressed individually and may be removed or handled by a land use agreement. Sale or transfer of the encroachment should remain an option depending on the circumstances involved and the viability of an adverse possession claim (§893.29 Wis. Stats.).

- (c) Provisions in the land use agreement, if that option is pursued, may include granting the encroacher permission to encroach on the County Forest lands with the following stipulations: no other encroachments will be allowed; the permit is non-transferable; the county must be notified once encroachment is terminated; county continues full ownership and control of property; permittee agrees to waive any rights to any future declaration of ownership or interest in the encroached county property; county reserves the right to cancel the permit and the permit is to be filed in the office of the Vilas County Forestry Department and all fees related to the land use permit shall be paid by the permittee.
- (d) Land Use Agreements shall be developed on a case-by-case basis using the above guidelines.

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ROADS, TRAILS AND ACCESS

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56

57 **700 ACCESS CONTROL AND HISTORY**

58 Resource management and protection activities, recreational uses, and other public uses on
59 the Vilas County Forest require several different types of access. Since the Forest is large
60 and diverse, a broad network of access routes have developed. A combination of
61 geography, soils, vegetation, surface waters, seasons of the year, presence/absence of roads
62 or trails, ownership of adjoining lands, and public regulations interact to control access to
63 any part of the Forest.

64

65 Many of the existing roads and trails were originally developed as railroad grades, logging
66 roads, forest fire protection lanes, or trails used to reach popular hunting and fishing areas.
67 The locations and standards for these earlier roads were not routinely established by county
68 personnel and many are located on soils and terrain not conducive for permanent, year-
69 round access.

70

71 Over the years, the road density and frequency of vehicle use on the Forest has increased in
72 response to an expanding number of motorized recreational vehicles and to an active timber
73 harvest program. Often times, different uses have occurred on the same trails with minimal
74 conflicts. But the diverse demands for, and uses of, the County Forest have reached the
75 point where an integrated access management plan is needed.

76

77 Historically, on the Vilas County Forest, widespread access availability, combined with
78 minimal vehicle regulations, have generated problems which County resource managers
79 must address. Among these problems and issues are:

80

81 User conflict between groups: e.g., snowmobiling versus cross-country skiing; hunting on
82 foot versus use of vehicles for access to game populations.

83 Safety: e.g., pleasure riding of horses on the same trail with vehicle traffic, or hiking.

84 Erosion: soils eroding due to use, or over-use by vehicles, esp. wetlands and steep slopes.

Damage to access: rutted or impassable roads requiring costly repair by the county or other specific user groups (e.g., snowmobile club).

Litter: depositing garbage, tires, appliances, and hazardous waste on the Forest.

Over-utilization of a resource; e.g. excessive unrestricted vehicle access to the Forest affecting game and non-game species requiring solitude as part of their life cycle, excessive harvest of game and fish, reducing populations and availability of the trophy size class.

Crowding: e.g. complaints from hunters about intensified competition for traditional hunting areas as a result of better access.

Fires: e.g. increased exposure of the resource to forest fire occurrence.

Endangered species management: e.g. high road densities conflict with timber wolf recovery, eagle and osprey nest disturbance.

Invasive species: e.g. introduction of invasive exotic species along travel routes.

Developmental trends: e.g. preservation of the County Forest solitude by limiting access versus development of high intensity use by additional roads and unlimited access.

Road placement: e.g. some roads should be closed for improper location and evaluated for replacement.

Clear and concise policy for the public.

705 CHAPTER OBJECTIVES: ACCESS MANAGEMENT POLICY

1. Provide direction to the Committee and resource managers in order to maintain a network of roads and trails on the County Forest. This will meet the needs for resource management and protection activities, as well as provide public access for recreation opportunities.
2. Identify the distribution, density, and types of roads and uses of roads and trails needed to establish a safe and efficient transportation and recreation system that complements the economic, environmental, and social interest in the County Forest.
3. Identify the existing and future County Forest roads eligible for transportation aids

under §86.315(1), Wis. Stats.

4. Identify areas on the County Forest where the access is limited or restricted.

5. Identify the provisions and criteria that will be policy when addressing management issues on the County Forest.

710 ROADS

Vilas County Forest staff will oversee the construction and maintenance of all roads within the County Forest. These roads may be constructed and maintained by the County, private contractors, or other agencies. The specifications for road construction and maintenance will vary with the frequency, duration, and planned use of each road. Three major types of roads occur on the Forest: permanent primary roads; permanent secondary roads, and temporary roads.

New road establishment should consider information identifying areas with sensitive soils or severe slopes that have the potential for adverse water quality impacts from land management practices. County staff can work with local DNR water resources staff to develop site-specific measures where appropriate.

710.1 PERMANENT PRIMARY FOREST ROADS

These roads are the primary roads providing access to the County Forest. They include County Forest Roads, Town Roads, County Highways, Wisconsin State Roads and Highways, and Federal Highways. These primary roads are designed, constructed, and maintained for year-round use, except that County Forest Roads are not routinely plowed during the snow season. Vehicle use may be restricted at various times of the year to minimize damage to the road or to accommodate a groomed snowmobile trail.

County Forest Roads certified under §86.31(1), Wis. Stats. must meet design standards of a 16-foot surface width and a 20-foot roadway width. A yearly aid payment is used to maintain and improve these certified public roads. The following table lists the roads

currently certified under §86.31(1), Wis. Stats. Also included are roads proposed for addition once improvements meet statute requirements.

VILAS COUNTY WDOT CERTIFIED

TOWNSHIP	SECTION	LENGTH (MI)	ROAD NAME/COMMENTS
Cloverland	11	.7	Boot Lake Landing Road
Cloverland	1	.3	Cooks Lake Landing Road
Cloverland	17,20	1.1	Ewald Lake Road
Cloverland	20	.35	Ewald Landing Road
Cloverland	11,13,14, 15	4.65	Katie Lake Fire Lane
Cloverland	3	.2	McLeod Lake Road
Cloverland	8,9,17	1.75	Mud Minnow Lk Fire Lane
Cloverland	9	.4	Muskie Landing Road
Cloverland	4	.3	Pickerel Landing Road
Cloverland	6,7,17,18	3.6	Pincherry Lake Road
Cloverland	1,6	.7	Range Line Lk Fire Lane
Cloverland	19,20,28, 29	3.51	Snipe Lake Fire Lane
Cloverland	8	.82	Sunken Lake Road
Cloverland	19,20,28, 29,30	4.3	Wood Duck Lake Road
Conover	18,19,24	1.72	Buckatabon Creek Trail

Conover	22	1.1	Claire Fire Lane
Conover	31,32	2.1	Heart Lake Road
Conover	22,27,28	.82	Marshall Lake Fire Lane
Conover	19,30	1.07	Mathwig Road
Conover	27,34,35	1.8	McLeod Lake Road
Conover	32,33	.79	NEPCO Landing Road
Conover	9,10,11,14, 15	4.1	Pioneer Creek Trail
Conover	27,33,34	2.15	Ski Hill Road
Conover	36	.24	Tellefson Lake Road
Conover	20	.47	Torch Lake Road
Conover	14,15,22	2.0	Walt's Fire Lane
Land O'Lakes	15	.35	Claire Fire Lane
Land O'Lakes	17,18	1.89	White Spruce Fire Lane
Lincoln	6	.93	Deep Lake Road
Plum Lake	9,16,17,20	2.65	Decker Lake Fire Lane
Plum Lake	5,8	1.1	Langley Lake Road
Plum Lake	28	.44	Marshall Lake Fire Lane
Total		48.4	

These permanent primary roads will be maintained and remain open to public use.

710.2 PERMANENT SECONDARY ROADS

These roads often serve a variety of uses including forest management, fire protection, and recreation. Roads in this category include such roads as the Hunter/Hiking Trails, the disabled hunter access trail, and snowmobile trails. These roads are maintained as part of a permanent road system but are often narrower than permanent primary roads and are built and maintained to lower standards. Maintenance of these roads may be annual, regular periodic, or irregular. Roads such as snowmobile trails, which are annually brushed out and cleared of hazards, receive routine annual maintenance. Roads such as Hunter/Hiking Trails, which are mowed and cleared of hazards on a 3 year rotational basis, receive periodic maintenance. Other roads in this category receive irregular maintenance, clearing, brushing, and removing of hazards, or erosion control measures to prevent soil movement on an as needed basis. Some of these roads are designed for use only when the ground is frozen or firm.

A number of roads in this category are located in areas on the Forest where motor vehicle use is limited or restricted. In these instances, the roads will be blocked and/or signed as restricted.

In instances where motorized traffic is restricted, vehicle access will only be authorized for planned management activities or fire protection. Foot traffic is allowed on all roads.

710.3 RESOURCE MANAGEMENT/ACCESS ROADS

Many of the roads on the Forest fall into this classification. Roads in this category are permanent roads, but are mainly used on a recurring or periodic basis, oftentimes for a short duration of time. These roads were primarily designed for forest management and timber sale access and receive limited maintenance. Maintenance of these roads is generally during and after a specific activity. When the activity is completed these roads are allowed to revegetate as some are closed by use of earthen berms/bunker or gates. Roads in this category that may remain open permanently or temporarily for recreational access or

firewood cutting, receive maintenance as needed to protect resources from erosion and environmental degradation. Due to the high density of roads on the Vilas County Forest, roads in this category will be evaluated during the plan period as to their need and value. Roads that are deemed unnecessary or serve little value in providing access will be closed and allowed to revegetate naturally or may be seeded. Roads that are scheduled to be closed after management activity will remain open for two years in areas that provide a firewood gathering opportunity for the public.

720 RECREATIONAL TRAIL ACCESS

This trail network provides access for many recreational opportunities on the Forest. An important role of the Forest is to provide sustainable recreational trails that do not cause long-term natural resource damage, and that are compatible with other uses. Management activities adjacent to recreational trails will be evaluated on a case-by-case basis. Where deemed necessary, alterations will be made to accommodate the recreational use. The Committee has the authority to open, close or relocate trails.

720.1 TRAIL CONSTRUCTION AND MAINTENANCE

Requests for recreational trails will be reviewed by the Committee. Groups requesting permission to develop a recreational trail must do so in accordance with the Trail Planning and Permitting process as described in Vilas County Resolution 2004-129, which is appended in Chapter 900.

Construction or maintenance of any recreational trail in which the activity would increase the erosion potential of one acre or more of land is subject to state and federal storm water runoff requirements (NR216, Wis. Adm. Code and s. 283.33, Wis. Stats). Construction or development for silvicultural purposes is presently exempt from these requirements. Recreational trail development in Vilas County will employ best management practices for water quality (PUB-FR-093-95) to mitigate any adverse impacts. For projects requiring a Storm Water Permit, an erosion control plan will be prepared for each project depicting the

location of the project and surrounding wetlands and what erosion control measures will be employed.

725 NON-MOTORIZED RECREATIONAL TRAILS

725.1 HIKING

725.1.1 Undesignated Hiking Trails

All portions of the County Forest are open to hiking or foot travel unless marked with signs closing an area.

725.1.2 Designated Hunter/Hiking Trails

The following trail systems are open for foot travel for multiple uses. During the snow season, portions of these trail systems serve to support the Vilas County State Funded Snowmobile Trail System.

Langley Lake

Decker Lake

Indian Lake

Disabled Hunter Area

Heart Lake

Muskrat Creek

Pioneer Creek

Torch Lake

Ski Hill

Snipe Lake

Mud Minnow Lake

Deep Lake

715.2 BICYCLING

725.2.1 Undesignated Bicycle Trails

All trails, roads, and fire lanes are open for recreational bicycle use. Off-trail mountain bike use may be restricted in specific areas if use causes erosion or other environmental

damages.

725.3 HORSEBACK RIDING

725.3.1 Undesignated Horseback Riding Trails

All trails, roads, and fire lanes are open for horseback trail riding. Off-trail riding within 50 feet of rivers, streams, or lakes is not permitted except when watering horses. Trails/areas may be designated open or closed to horseback riding as conditions warrant.

725.3.2 Designated Horseback Riding Trails

The Committee has the authority to approve requests for designated horseback riding trails.

725.4 CROSS-COUNTRY SKIING

725.4.1 Undesignated Cross-Country Ski Trails

All trails, roads, and fire lanes are open for cross-country skiing. Cross-country skiing on groomed snowmobile trails is not permitted due to serious safety concerns.

725.4.2 Designated Cross-Country Ski Trails

One regularly groomed cross-country ski trail is available for public use on the Forest. The Langley Lake X-C Ski Trail provides 5.3 miles of groomed trail divided into 3 loops, the longest of which is 4.62 miles.

725.5 OTHER NON-MOTORIZED USE

Other non-motorized recreational trail uses including, but not limited to, snowshoeing, dog sledding, and hunting on foot are permitted on all trails except where otherwise posted as closed.

730 MOTORIZED RECREATIONAL TRAILS

The use of motorized vehicles on the Forest continues to increase. The design, maneuverability, and power of the vehicles have improved. This has led to greater use; increased trail use conflicts, unnecessary environmental damage, and increased expenses necessary for trail maintenance. Additional regulation on these types of recreational vehicles is needed to protect the Forest and limit adverse impacts on non-motorized uses.

730.1 SNOWMOBILING

730.1.1 Undesignated Snowmobile Trails

No cross-country use is permitted; however, snowmobile use is permitted on all logging roads, and fire lanes when the ground is snow-covered. Use on the Forest during other times of the year is not allowed.

730.1.2 Designated Snowmobile Trails

Two types of groomed snowmobile trails are authorized on the Forest: state-funded trails and local club trails. Annual agreements outline the operation, maintenance, and insurance obligations between Vilas County and local snowmobile clubs.

State trails: A system of state approved and funded snowmobile trails is authorized on designated trails, logging roads, and fire lanes. This system is part of the statewide network of snowmobile trails which links Vilas County with adjoining counties as well as the rest of the state and the State of Michigan. Snowmobile registration and out-of-state user fees are used to support trail development, signing, maintenance, grooming and bridge construction.

Local trails: A smaller network of local club-sponsored snowmobile trails is also permitted on designated trails, logging roads, and fire lanes. Maintenance of these trails is supported by club membership fees and fund raising activities. These trails are held to the same standards as the State Trails.

All groomed snowmobile trails are closed to all cars and trucks from December 1st through March 31st unless vehicle use is authorized by Vilas County. When vehicle use is authorized, contractors must maintain the trail in a safe condition, free from debris.

DNR's Trail Signing Handbook will be used as the guide for posting standardized signs and will assist in promoting uniformity for trail signing throughout the county. Only trail signs that provide information for safety, regulations, or trail directions will be permitted. Private

and business signs are not authorized on the Forest except at trail intersections as signs authorized by the Committee and the Vilas County Snowmobile Alliance. All trail signs must be mounted on posts.

730.2 ALL TERRAIN VEHICLES (ATV)

730.2.1 ATV Trails

ATV's, 3, 4, and 6 wheelers, motocross bikes, and other vehicles not registered and licensed for use on public roadways are prohibited on the Vilas County Forest except where allowed as per Vilas County General Code Chapters 16.08(10) and 16.08(8)(d) The Department may use ATV's in the course of management or may grant temporary permission to contractors performing management on the Forest for a specific period of time.

Two types of ATV trails are authorized on the Forest: state-funded trails and local club trails. Annual agreements outline the operation, maintenance, and insurance obligations between Vilas County and local ATV clubs.

State trails: A system of state approved and funded ATV trails is authorized on designated trails, logging roads, and fire lanes. This system is part of the statewide network of ATV trails which links Vilas County with adjoining counties as well as the rest of the state and the State of Michigan. ATV registration and out-of-state user fees are used to support trail development, signing, maintenance, and bridge construction.

Local trails: A smaller network of local club-sponsored ATV trails is also permitted on designated trails, logging roads, and fire lanes. Maintenance of these trails is supported by club membership fees and fund raising activities. These trails are held to the same standards as the State Trails.

DNR's Trail Signing Handbook will be used as the guide for posting standardized signs and will assist in promoting uniformity for trail signing throughout the county. Only trail signs that provide information for safety, regulations, or trail directions will be permitted. Private and business signs are not authorized on the Forest except at trail intersections as signs authorized by the Committee. All trail signs must be mounted on posts.

327 730.2.2 Department Involvement in ATV Trails

328 The Department, per County Board Resolution 2004-101, is authorized to act as Sponsor to
329 apply for funding through Wisconsin DNR for ATV trails in Vilas County on lands other
330 than Vilas County owned lands and to contract for the maintenance of approved trails.

331
332 730.3 OFF HIGHWAY MOTORCYCLES (OHM)

333 730.3.1 Undesignated Motorcycle Trails

334 Off highway motorcycles may only operate on designated trails. Motorcycles are prohibited
335 behind any gated, bermed, or blocked location, or on any sign restricted trail or designated
336 non-motorized trail.

337 Exceptions include:

- 338 1) Street legal motorcycles, driven by licensed operators, are allowed on the
339 Vilas County Forest Road System open to motorized vehicles. All non-street
340 legal motorcycles may only operate on designated trails.
- 341 2) By permit of the committee.
- 342 3) For official business of the county, state, or U.S. government, and for search
343 and rescue efforts.

344 730.3.2 Designated Motorcycle Trails

345 Tamarack Creek Off Highway Motorcycle Trail

346 All street legal and non-street legal motorcycles must be registered with the State of
347 Wisconsin and operate under §23.335, Wis. Stats., to operate on designated trails. This trail
348 system consists of trails that wind and loop through a portion of the county forest, ranging
349 in skill level from beginner to advanced. The trail system is designed for off highway
350 motorcycle (OHM) recreation activities. Annual agreements outline the operation,
351 maintenance, and insurance obligations between Vilas County and local OHM clubs. The
352 trail system is developed, maintained, and operated under such land use agreement with the
353 LandOver ATV Club in cooperation with Vilas County and Department of Natural
354 Resources. Trails are closed for the period of November 1st through April 30th of the
355 following year. Trails may be temporarily closed due to environmental degradation, natural

disasters, during seasonally wet periods, for protection against forest fires, or for other reasons as determined by the county.

DNR's Trail Signing Handbook will be used as the guide for posting standardized signs and will assist in promoting uniformity for trail signing throughout the county. Only trail signs that provide information for safety, regulations, or trail directions will be permitted. Private and business signs are not permitted on the Forest. All trail signs must be mounted on posts.

730.4 OTHER MOTORIZED RECREATIONAL VEHICLE TRAILS

730.4.1 Undesignated Motorized Recreation Trails

Currently there are 236.17 miles of roads and trails open to motorized public access on the Vilas County Forest. This constitutes 51% of the total miles (461.9) of roads and trails on the County Forest. Of these miles of open roads, 85.51 miles do not have a reliable, periodic source of funding for maintenance. In the interest of resource protection and considering funding, all new timber access roads which do not meet a positive need evaluation shall be planted or allowed to regenerate naturally to trees. There are currently 7.26 miles of roads and trails per square mile of County Forest.

Motorized recreation use of the County Forest is only allowed where it does not conflict with trails designated for other recreation uses or where trails are blocked by use of gates or berms. Vehicles must be legally registered and licensed to operate on public roads and highways.

730.4.2 Designated Motorized Recreation Trails

Included in the Langley Lake Hunter/Hiking Trail area is the Vilas County Disabled Hunter Access Trail. This trail (1.5 miles) has been improved for driving access for Class A and Class B disabled hunter permit holders. Permits issued for vehicle use of this trail are valid only for the Permittee. One additional person, to assist the Permittee, must be negotiated with the Forestry Department as a special condition.

735 RESTRICTED ACCESS AREAS

In addition to providing trails for motorized vehicle use, the Forest may also provide and designate areas where motorized equipment is not permitted unless authorized by the Committee. The principal intent of these areas is to prevent environmental damage to sensitive areas, protect historical or archeological sites, protect endangered and threatened species, provide for human safety and provide areas for quiet, secluded recreation. Such areas are posted, restricting the use of motorized vehicles. The Vilas County Forest contains Native American village sites in the northwest part of the Forest and the White Spruce Lake wilderness campsite which are restricted access areas.

740 WATER ACCESS

As a result of the wide distribution of lakes, streams, rivers, and other surface waters on the Forest, water access may be planned, developed, or restricted as a component of the overall Forest access management plan. Several boat landings, canoe landings, and adjacent roads currently provide water access on the Forest primarily for recreational activities. In addition, these water access points also provide water supply points for fire apparatus working to suppress forest fires or nearby structural fires.

The existing water access points will be maintained to provide a place to launch a small fishing boat or canoe. Not all watercraft will be able to use these access points. These landings are built for public use and not for private boat mooring sites. Mooring or storing boats for longer than 24 hours is prohibited.

740.1 PUBLIC BOAT ACCESS SITES MAINTAINED BY VILAS COUNTY FOREST

The Vilas County Forest maintains 11 improved landing sites. A listing of these sites and their associated facilities is referenced in Chapter 900.

740.2 PUBLIC BOAT ACCESS SITES MAINTAINED BY TOWNS WITHIN THE COUNTY FOREST BOUNDARY

- 415 1. Indian Lake
- 416 2. Joyce Lake
- 417 3. Claire Lake
- 418 4. Portage Lake
- 419 5. Stormy Lake
- 420 6. Wisconsin River –Highway K

421

422 740.3 UNDEVELOPED WATER ACCESS POINTS

423 These sites provide access to the following waters. The sites require canoes, kayaks, or
424 small boats to be carried in varying distances from the nearest parking place:

- 425 1. Camp 12 Lake
- 426 2. Deep Lake
- 427 3. McLeod Lake
- 428 4. Wood Duck Lake
- 429 5. White Spruce Lake
- 430 6. Lake of the Woods
- 431 7. Tellefson Lake
- 432 8. Ewald Lake
- 433 9. Rice Lake
- 434 10. Mud Lake
- 435 11. Cook’s Lake
- 436 12. Wisconsin River – Rummels Road
- 437 13. Wisconsin River – River Road

438

439 745 WETLANDS

440 In addition to surface waters, all wetlands on the Forest are closed to motorized recreational
441 vehicle use when soils are not frozen. Vehicle use during non-frozen seasons causes soil
442 rutting, compaction and damage to vegetation. The wetlands are not listed individually here
443 but include all areas where soils, groundwater or surface waters support the growth of

vegetation commonly associated with wetland plant communities.

755 ACCESS TO PRIVATE LANDS

Applications by private parties to build or improve access roads through County Forest land will be considered by the Committee on a case-by-case basis. The following stipulations will be adhered to before an "Access Permit" is granted.

1. Access across County Forest lands must be demonstrated by the applicant as the route of last resort. Proposed uses must be documented by the applicant.
2. No legal easement will be granted, just permission to cross county lands.
3. The permit is non-transferable. New landowners must apply to continue the land use agreement.
4. Road improvements and upgrading must be approved and will be supervised by the Forestry Department staff. Prior notification of three (3) days is required before work starts.
5. All wood cut is the property of Vilas County.
6. Roadway must be opened to the public through County Forest Land. No gate may be erected on County Forest Land.
7. The County continues full ownership of the improved roadway; however, it shall not be liable for maintenance or upkeep of the road.
8. Permittee waives any rights to any declaration of ownership or interest in the road on County Forest Land for administrative costs as a result of this "Access Permit". The access permit is granted upon the signature and any fees being received by the Vilas County Forestry Department.
9. The fee schedule for a one time payment is set at \$50.00 for a 5 year period. The fee for construction of a new road to provide access to private lands is the acreage of the new road, using 20 feet as the road width, multiplied by the average assessed acreage value in the town the new road is located in and not less than \$500.00.
10. The standard Land Use Agreement Access permit is included as an exhibit in Chapter 900-17.

473
474 **755.1 ACCESS FOR PRIVATE TIMBER MANAGEMENT**

475 To encourage timber management on private lands, Vilas County allows for the access
476 across County Forest Land on existing roads free of charge. However, to secure the
477 condition of access roads a \$500.00 Performance Deposit is required as part of the Logging
478 Access Permit. The Logging Access Permit is appended in Chapter 900.

479
480 **760 PUBLIC UTILITY ACCESS**

481 Access of the County Forest for utility reasons is covered under Chapter 500, Special Uses.

482
483 **765 BEST MANAGEMENT PRACTICES**

484 The layout and construction of any new road or trail situated on the County Forest shall
485 adhere to *Wisconsin's Best Management Practices for Water Quality* (PUB-FR-093-95).
486 This access management plan addresses the need and diversity level of forest roads and
487 trails within the County Forest. Chapter 6 of the BMP Manual provides guidelines for road
488 construction. Soil disturbance activities in areas of highly erodable soils, or in close
489 proximity to lakes and streams may require mitigating measures in excess of those currently
490 listed in the Best Management Practices manual PUB-FR-093-95. Wider buffers, sediment
491 control structures and water diversion techniques will be used as appropriate in these
492 sensitive areas.

493
494
495 **770 SIGNS**

496 Signs on the County Forest will be used discreetly to perform and function with minimal
497 disruption to the multiple uses of the Forest. Private signs promoting personal,
498 commercial or political objectives will not be permitted without authorization from
499 Vilas County. Signs erected by the county for management purposes or by non-profit
500 recreational trail groups will be as follows:

- 501 1. Informational Type Signs

- A. Interpretive Signs - to educate the general public about forest management practices.
 - B. Public Land Signs - to identify the land as Vilas County Forest property.
 - C. Trail Markers - to provide direction and safety to trail users.
 - D. Scientific, Historical or Geological Markers - to identify points of interest.
 - E. Recreational Facility Markers - to identify park entrances, etc.
 - F. Directional Markers.
2. Regulatory Type Signs - to regulate the use of the Forest in specific areas.
- A. Regulatory and information signs at Boat Landings shall be posted on a signboard such as that erected at Muskellunge Lake Landing by the Lake Association. An example is given in Chapter 900.

770.1 SIGNING STANDARDS

To assure that signs will serve a purpose without damaging aesthetics, the following standards will be maintained:

1. All signs will be mounted on posts. Signs will not be mounted on trees.
2. Routed wood signs will be used wherever practical. Fiberboard or painted metal signs, when used, will be of neat appearance.
3. Signs placed on snowmobile trails must conform to state standards and be approved by the committee.
4. All authorized signs shall be protected by ordinance from being damaged, defaced, obstructed, removed, or possessed by unauthorized persons.
5. All unauthorized signs will be removed by the Forestry staff. No compensation will be afforded for loss or damage to signs during removal. Individuals erecting unauthorized signs may be prosecuted under §943.13(3), Wis. Stats.

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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CHAPTER 800

INTEGRATED RESOURCE MANAGEMENT

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94

95 **800 CHAPTER OBJECTIVES**

96 To introduce and communicate to the public, the County Board of Supervisors,
97 and to the Wisconsin DNR, the integrated resource approach that forestry,
98 wildlife and other natural resource staff will use on the Vilas County Forest
99 during this planning period.

100

101 **805 INTEGRATED RESOURCE MANAGEMENT APPROACH**

102 Integrated Resource Management is defined as: "the simultaneous consideration
103 of ecological, physical, economic, and social aspects of lands, waters and
104 resources in developing and implementing multiple-use, sustained yield
105 management" (Helms, 1998)

106

107 This balance of ecological, economic, and social factors is the framework within
108 which the Vilas County Forest is managed. This broad definition describes the
109 content of everything within this Vilas County Forestry Plan. Previous chapters
110 have discussed in depth many of the social and economic issues.

111

112 For the purpose of this chapter, the scope of Integrated Resource Management
113 includes:

114 Forests, habitats, biological communities

115 Wetlands and waters

116 Wildlife and endangered resources

117 Soils and minerals

118 Cultural and historical resources

119 Management of one resource affects the management or use of other resources in
120 an area. Managing each use or resource by itself is less effective than managing
121 all of them in an integrated way. This is a field level approach to integrated
122 resource management. Management decisions are made while considering that
123 each site is part of a larger ecosystem. Similarly, the development and

124 implementation of this plan also considers other planning efforts in order to
125 provide for broader scale management.
126 The working definition of Integrated Resource Management means, in large part,
127 keeping natural communities of plants and animals and their environments
128 healthy and productive so people can enjoy and benefit from them now and in the
129 future.

130

131 The remainder of this chapter is written to help communicate how the Forest is
132 managed on an integrated resource approach.

133

134 **810 SUSTAINABLE FORESTRY**

135 The definition of sustainable forestry in the Wisconsin Administrative Code and
136 the Wisconsin Statutes is as follows:

137 "the practice of managing dynamic forest ecosystems to provide
138 ecological, economic, social and cultural benefits for present and future
139 generations" NR 44.03(12) Wis. Adm. Code and §28.04(1)e, Wis. Stats.

140

141 For the purpose of this chapter, 'sustainable forestry' will be interpreted as the
142 management of the Forest to meet the needs of the present without knowingly
143 compromising the ability of future generations to meet their own needs
144 (economic, social, and ecological) by practicing a land stewardship ethic which
145 integrates the growing, nurturing, and harvesting of trees for useful products with
146 the conservation of soil, air and water quality, and wildlife and fish habitat. This
147 process is dynamic, and changes as we learn from past management.

148

149 **810.1 TOOLS IN INTEGRATED RESOURCE MANAGEMENT**

150

151 **810.1.1 Compartment Recon**

152 The County will support and utilize the compartment reconnaissance procedures
153 as set forth by the DNR Public Forest Lands Handbook 2460.5. The Vilas County
154 Forestry Department in cooperation with the DNR will be responsible for the

completion and maintenance of the recon system. Currently the recon data is updated on a 20 year interval, approximately 2,000 acres/year. The data will be utilized in planning and scheduling resource management.

810.1.2 Forest Habitat Classification System

The Forest Habitat Classification System (*A Guide to Forest Communities and Habitat Types of Northern Wisconsin Second Edition; Kotar, et al*) is a natural classification system for forest communities and the sites on which they develop. It utilizes systematic interpretation of natural vegetation with emphasis on understory species.

The Forest Habitat Classification System is an ecological tool that promotes a common language for interpreting site capability based on potential natural vegetation. Its primary use is the assessment of biological potential of upland forest sites. Through the application of Forest Habitat Classification, land managers are better able to assess site potential of current stands, identify ecological and silvicultural alternatives, predict the effectiveness of possible silvicultural treatments, assess feasible management alternatives, and choose appropriate management objectives.

Data will be collected in order to classify the entire forest. This information should be collected along with, and made part of, the compartment reconnaissance system during regular field inspections. This data should also be compared to soil survey information in order to associate the relationships between forest habitat types and soil types.

Vilas County Forest Habitat Types

Vilas County Forest supports a great diversity of forest types. Nineteen relatively common tree species make up a wide range of upland forest types. In broadest terms we can group forest types into those of dry to dry-mesic, mesic and wet-mesic habitat types. Wet and lowland sites have not been classified into habitat

types for Vilas County. Vilas County forest has eight predominant habitat types throughout the forest. These habitat types encompass over 31,450 acres or nearly 78% of the forest; the remaining acres are mainly on the wet and lowland habitat types. The dry to dry-mesic types are characterized by mixtures of pine, oaks, aspen, white birch, and red maple on the dry to dry mesic habitat types. The dry to dry mesic habitat types on Vilas County forest are **PQE** (very dry to dry moisture regime and very poor to poor nutrient regime), **PArV** (dry moisture regime and poor nutrient regime), **PArVAa** (dry to dry-mesic moisture regime and poor to medium nutrient regime) and **AVVb** (dry-mesic moisture regime and medium nutrient regime). The stands of mesic sites are typically dominated by sugar maple and basswood and occasionally by aspen. White ash, ironwood, red maple, yellow birch and hemlock are often associated with these stands. The mesic habitat types on Vilas County forest are **ATM** (mesic to dry-mesic moisture regime and medium nutrient regime) and **ATD** (mesic moisture regime and medium to rich nutrient regime). The wet-mesic habitat types are characterized by red maple, balsam fir, white spruce, aspen and white birch. Basswood, ashes and sugar maple are well represented on richer sites. Hemlock and yellow birch are also associated with these richer sites. The wet-mesic habitat types on Vilas County forest are **TMC** (mesic to wet-mesic moisture regime and medium nutrient regime) and **ArAbVC** (mesic to wet-mesic moisture regime and poor nutrient regime). ¹ The following paragraphs briefly describe each of the common habitat types on the Vilas County Forest.

The **PQE**, *Pinus strobus*-*Quercus rubra*/*Epigaea repens* (White Pine-Red Oak/Trailing Arbutus) habitat type is the driest and most nutrient poor habitat occurring on the Vilas County Forest. The PQE habitat type encompasses over 3500 acres of the Vilas County Forest or approximately 8.8% of the forest. Of the 3500 acres, Jack Pine is the dominant cover type on over 2500 acres or 72% of this habitat type. This habitat type occurs on deep, excessively drained outwash sands. Bracken fern typically is the most dominant ground flora. Grasses, sedges

¹Referenced: *A Guide to Forest Communities and Habitat Types of Northern Wisconsin – Second Edition – 2002, Department of Forest Ecology and Management University of Wisconsin-Madison, by John Kotar, Joseph A*

and wintergreen are commonly found on this habitat type. Generally this habitat type lacks a shrub component; particularly *Corylus* spp. Blueberries and sweetfern are best represented shrubs. Jack Pine is the predominant forest cover type occurring on this habitat type. Other forest cover types found on this type include Red Pine, Aspen, Red Oak-Red Maple, and mixtures of Jack Pine - Red Pine and to a lesser degree White Pine. Red Oak and Red Maple saplings are often present, but neither species grows well on this habitat type. All tree species occurring on this habitat type are adapted to disturbance. White pine easily succeeds other species when seed source is available although it may suffer mortality in years of extreme drought. The PQE habitat type is most suitable for Jack Pine management. Red Pine plantations are possible, but productivity is only moderate and survival may be a problem during drier years or drought. If Red Pine is established, shorter rotations are recommended with fiber production being the objective as opposed to sawtimber production. Aspen and Red Oak are not recommended except for wildlife considerations. This type has poor vertical structure of stands with very little potential for improvement.

The **PArV** habitat type is characterized by *Pinus strobus*-*Acer rubrum*/*Vaccinium angustifolium* (White Pine-Red Maple/Low-sweet-blueberry). The PArV habitat type is the most common habitat type on the Vilas County Forest it encompasses nearly 15,400 acres or approximately 38% of the Vilas County Forest. Of these approximately 15,400 acres, Aspen is the dominant cover type on over 9174 acres or 60% of this habitat type. The Red Pine and Jack Pine forest cover types also have significant acreages on this habitat type (2473-acres for red pine and 2100-acres for jack pine). This habitat type is associated predominantly with outwash sands, and usually occurs on excessively to somewhat excessively drained sands and loamy sands. The presumed climax overstory is White Pine in the main canopy layer and Red Maple and Red Oak constituting a second canopy layer. Common forest cover types include the following: Aspen and/or White Birch, Aspen-Red Oak, Aspen-Pines, Jack Pine, Red Pine, White Pine, Red Oak-Red Maple, Red Oak, and Balsam Fir-White Spruce. PArV is the most common

habitat type on sandy soils within the Vilas County Forest. This habitat type has been successfully managed for Jack Pine, Red Pine, and Aspen. Unmanaged stands of Red Oak and Red Maple are also common; however, quality sawlog Red Oak management is more effective on more nutrient rich and slightly more mesic sites. White Pine management is also possible on this habitat type; however, this type is also at the lower end of its suitable habitat type.

The **PArVAa** habitat type is found on over 8200-acres or 20% of the Vilas County Forest. The PArVAa habitat type is characterized by *Pinus strobus* – *Acer rubrum*/*Vaccinium angustifolium* – *Aralia nudicaulis* (White Pine – Red maple/Low Sweet Blueberry-Wild Sarsaparilla) habitat classification. This habitat type is associated primarily with outwash, but also occurs on moraines and lake plains and is somewhat excessively to excessively drained loamy sands. The presumed climax overstory is White Pine however Red Maple and Red Oak constitute a second canopy layer. Common forest cover types include the following: White Pine, Red Pine, Red Oak, Red Oak/Red Maple, Aspen or Aspen-White Birch and White Spruce-Balsam Fir. Sugar Maple and Red Maple seedlings and saplings may be present but do not appear to be capable of dominating this habitat type. This habitat type supports a well developed shrub layer dominated by beaked hazel. Other common shrubs and small trees include blackberries, junberries and blueberries. Dominant ground flora found on this type includes bracken fern and large-leaved aster. Wintergreen, wild lily-of-the-valley, and star flower are also well represented. This type is particularly suited to the management of Red Pine, White Pine, or Jack Pine. Growth potential for these species is high, and understory competition can be low. Aspen should also be considered as an alternative for wildlife purposes as well as for forestry. On the Vilas County Forest aspen is the dominant forest cover type represented on this habitat type with nearly 4800-acres. Red Oak grows moderately well in this type and is a good choice for wildlife and fiber production. Over half of Vilas County's Oak stands are growing on this habitat type. Potential for management of hardwoods other than Red Oak and Red Maple is very low.

There are 460-acres of **AVVb** habitat type on the Vilas County Forest and of these 342-acres (74%) are dominated by red oak. The **AVVb** habitat type is characterized by *Acer saccharum*/*Vaccinium angustifolium*-*Viburnum acerifolium* (Sugar Maple/Low Sweet Blueberry - Mapleleaf Viburnum). The presumed climax overstory for this habitat type is Sugar Maple - Red Maple - Red Oak. Sugar Maple reproduces in many stands on this habitat type; however, it grows slowly and probably will not completely displace Red Oak and Red Maple. Other common forest cover types include the following: Aspen and/or White Birch, Aspen-Red Oak, Red Oak, Red Oak-Red Maple, Sugar Maple, White Pine, and Red Pine. White Pine and Red Pine dominated this type in the pre-logging era as evidenced by large charred stumps. Today many stands on this type contain a large component of Red Oak and Red Maple. Red Oak and Red Maple appear to be well suited to this type. Red Oak reproduction is usually present and it responds well to release. It has been demonstrated in shelterwood cuts in Vilas County that Oak can more than keep pace with the height growth of maples and other hardwoods on this type. Some stands on this type are developing a natural understory of White Pine, which provide further management options. Hazel and Maple-leaved Viburnum are the best represented shrub and small trees on this habitat type. Other common shrubs and small trees that make up this layer are juneberry, blackberries and bush honeysuckle. The ground flora is characterized by bracken fern and large-leaved aster typically being dominant. Other ground flora frequently found include; wintergreen, starflower, wood anemone, wild sarsaparilla, wild lily-of-the-valley and rosey twisted stalk. This habitat type has a high potential for a well-developed and diverse shrub layer and low potential for ground vegetation. These important characteristics have wildlife management implications.

Approximately 40% or nearly 890-acres of Vilas County Forest Northern Hardwood forests are found on the **ATM** habitat type. The **ATM** habitat type is characterized by *Acer saccharum*-*Tsuga canadensis* / *Maianthemum canadense* (Sugar Maple-Hemlock/Wild-Lily-of-the-Valley). The presumed climax overstory for **ATM** is Sugar Maple-Hemlock-Yellow Birch. Common forest cover types

include the following: Sugar Maple, Sugar Maple-Basswood-Ash or Yellow Birch, Sugar Maple with Red Maple or Red Oak, Red Oak, Red Oak with Basswood and/or Red Maple, Aspen and/or White Birch, and Balsam Fir-White Spruce. The shrub layer is moderately well developed only in younger and early succession stands. The most common shrubs found on this type include; hazel, alternate-leaved dogwood, fly honeysuckle and bush honeysuckle. Ground flora species typical of dry mesic to mesic sites dominant this habitat type; they include large-leaved aster, wild sarsaparilla, wild lily-of-the-valley, and bracken fern. Other species of ground flora commonly found are club mosses, shield fern, lady fern, starflower, and yellow beadle and wood anemone. ATM is perhaps the most diverse type in terms of management options. This habitat type supports the highest number of tree species and therefore the most diverse mixtures of forest cover types. Growth rates are high for both conifers and hardwoods.

Vilas County Forest has 878-acres of the **ATD** habitat type. Northern hardwood forests are the dominant forest cover type on all the acres of the ATD habitat type. The ATD habitat type is characterized by *Acer saccharum*-*Tsuga canadensis* / *Dryopteris spinulosa* (Sugar Maple-Hemlock/ Spinulose Shield Fern). The presumed climax overstory is Sugar Maple-Hemlock-Yellow Birch. Other common forest cover types include the following: Sugar Maple, Sugar Maple-Basswood-Ash-Yellow Birch), Hemlock-Sugar Maple-Yellow Birch, Sugar Maple-Red Maple, and Aspen and/or White Birch. The shrub layer on this habitat type is typically not well developed. Gooseberries, leatherwood, alternate-leaved dogwood, red-berried elder and fly honeysuckle are species commonly found on this habitat type but their occurrence frequency is generally low. Most species of ground flora coverage is also typically low except for shield fern and lady fern. Other common species found include; wild lily-of-the-valley, starflower, large-leaved aster, wild sarsaparilla, rosey twisted stalk, and hairy Solomon's seal. Management options are relatively limited on this habitat type. Sugar Maple seedlings heavily dominate this habitat type at all stages of succession. Many present stands on this type are in poor condition due to past cutting practices. Many other stands are overstocked with small diameter trees. Hardwood

productivity on this type is very high when properly managed. This type is also well suited to Hemlock management. Wildlife values on this type are generally low unless browse production is maintained by frequent thinning.

Nearly 800-acres or 2% of the Vilas County Forest is classified as the **TMC** habitat type. The TMC habitat type is characterized as *Tsuga canadensis* / *Maianthemum canadense* - *Coptis groenlandica* (Hemlock/Wild-lily-of-the-Valley - Goldthread). The moisture regime ranges from mesic to wet-mesic and nutrient status is medium. Common forest cover types are typically dominated by the following species: aspen, red maple, balsam fir and sugar maple. White Birch, Yellow Birch, White Spruce, and Hemlock are often associated with this habitat classification. The presumed climax overstory is Hemlock, Red Maple, Sugar Maple and Yellow Birch. The shrub layer on this habitat classification is not well developed. The most common shrubs species present are hazel, fly honeysuckle and bush honeysuckle. Blackberries and dwarf raspberries are occasionally abundant. The herb layer is characteristic of northern (near-boreal) forests with raw humus substrate and primarily composed of wild lily-of-the-valley, starflower, bunchberry, club mosses, yellow beadlelily, large-leaved aster, wild sarsaparilla, bracken fern and shield fern. This type occurs most commonly in low-lying areas within many of the other habitat types. This habitat type is commonly found on moraines and typically occurs on low-lying areas, along slope bottoms and drainageways. It also is a transition type from lakeshores and swamps to uplands. The conifers that are usually associated with this type (balsam fir, white cedar, white spruce, and hemlock) contribute greatly to local community diversity. Hardwoods do grow on this type but because of their poor growth and vigor are probably best suited to wildlife habitat and pulpwood. Young stands are capable of producing good mixtures of browse. When this type occurs on better-drained upland positions, it is well suited to white pine management. There are harvesting and equipment limitations on this type because of seasonal poor drainage and shallow soils. Seasonally high water tables may cause swamping on heavily disturbed sites where there is a decrease in transpiration. The shallow

soils also contribute to windthrow. Succession on these sites is heavily influenced by frequent small-scale disturbance caused primarily by windthrow.

The habitat classification **ArAbVC** - *Acer rubrum*/*Vaccinium-Coptis* (*Acer Rubrum*-*Abies balsamea*/ *Vaccinium angustifolium*- *Coptis groenlandica*) commonly known as Red Maple-Balsam Fir/Blueberry-Goldthread is found on over 560-acres (less than 2%) of the Vilas County Forest. This habitat type is associated primarily with pitted outwash, but also occurs on moraines and lake plains where water worked sands have accumulated. This habitat type typically occurs in scattered low-lying areas, along drainageways and lake or swamp borders. It is most commonly associated with somewhat poorly drained, podzolized loamy sands and sands. The moisture regime is mesic to wet mesic and the nutrient regime is poor. The presumed climax overstory is, Red Maple and balsam fir however, White Pine appears to be capable of maintaining itself in small numbers through regeneration gaps. Stands are dominated by Aspen, Pine (white, red), red maple and balsam fir. White birch and White Spruce are common associates. The shrub layer is only moderately developed. Species most commonly represented are blueberries, hazel, blackberries, junberry, and bush honeysuckle. The herb layer is generally well developed but is low in species diversity. Bracken fern, large leaved-aster, and wild sarsaparilla are dominant. Goldthread, Club mosses and bunchberry are common. This type is suited to the management of Red Maple, Aspen, Balsam Fir, White Birch, and White Spruce. This habitat type also offers good potential for management of conifers for wildlife benefits and for enhancing landscape diversity. Harvesting and equipment is limited because of seasonal poor drainage and shallow soils. Heavy cutting on wet soils may cause a rise in water table due to decreased transpiration and leading to swamping of the site. Windthrow is always a potential hazard on this habitat type.

810.1.3 Soil Surveys

Forestry staff's knowledge of forest ecology and their experience across the landscape can assist in associating forest habitat types and site indices with soil

type information. These associations can be beneficial in determining management prescriptions for specific sites. Detailed soil surveys of Vilas County have been made a part of the compartment reconnaissance system and continue to be correlated to the Forest Habitat Classification system.

Several copies of The Soil Survey of Vilas County, Wisconsin, produced by the U.S. Department of Agriculture, are on file at the Forestry Department Headquarters.

810.1.4 National Hierarchical Framework of Ecological Units/Ecological Landscapes of Wisconsin

Integrated resource management recognizes that an individual forest site is part of a larger landscape, and management activities can have an impact beyond a specific site. The National Hierarchical Framework of Ecological Units (NHFEU) is a useful tool in understanding natural landscapes.

The Wisconsin DNR uses Ecological Landscapes of Wisconsin (WDNR Handbook 1805.1) which is an ecological land classification system based on the National Hierarchical Framework of Ecological Units (NHFEU). Ecological landscapes distinguish land areas different from one another in ecological characteristics. A combination of physical and biological factors including climate, geology, topography, soils, water, and vegetation are used. They provide a useful tool and insight into ecosystem management. Land areas identified and mapped in this manner are known as ecological units.

Landtype Associations (LTA's) are considered landscape-scale ecological units, and are identified by surficial geology, patterns of vegetation, soil parent materials, and water tables. Most LTA's are between 10,000 and 300,000 acres in size.

Each landtype association contains a general description of characters such as landform, historic vegetation, current vegetation, water resources, land area, socioeconomic data, agriculture, population, and ecological opportunities.

Goals can be developed for an LTA based in part on its capability, productivity, unique character, and the scarcity or abundance of similar LTA's in the state, region or beyond. Objectives for vegetation management, wildlife habitat, ecological restoration, and recreation use can be tailored to the characteristics and potentials of the ecosystem.

810.1.5 Integrated Pest Management

Integrated Pest Management for the purpose of this Plan, is defined as follows:

“the maintenance of destructive agents, including insects, at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.”

The Committee has the authority to approve and direct the use of pesticides and other reasonable alternatives in an integrated pest management program on the Forest. Chemicals that are listed on the FSC® “Highly Hazardous Pesticide” and SFI® banned lists will not be used without proper derogation from FSC® and SFI®. Whenever possible, non-chemical (silvicultural prescriptions and biological control) methods will be used.

Refer to Chapter 600 (610.3) for more detailed discussion and integrated pest management strategies.

810.1.6 Best Management Practices for Water Quality

Often the most practical and cost-effective method to assure that forestry operations do not adversely affect water quality on the County Forest is to utilize

"best management practices" (BMP's) as described in *Wisconsin's Forestry Best Management Practices for Water Quality* (Publication Number FR093).

Consistent with the aforementioned manual (page 6), Vilas County will use BMP's on the Forest with the understanding that the application of BMP's may be modified for specific site conditions with guidance from a forester or other natural resource professional. Modifications will provide equal or greater water quality protection, or have no impact on water quality. Areas with highly erodable soil types, close proximity to streams or lakes, or steep slopes may require mitigating measures in excess of those outlined in the manual. All Vilas County employees practicing forestry will receive BMP training. Additionally, Vilas County will encourage BMP training of all logging contractors that operate on County timber sales.

810.1.6a Vilas County Zoning Ordinances

Further protection of the waters and shorelands of Vilas County lakes and streams is provided under the Vilas County General Zoning Ordinance and the Vilas County Shoreland Zoning Ordinance. Land management activities addressed under these ordinances are applied to the area within 1,000 feet of the ordinary high water mark of navigable lakes, ponds, and flowages and within 300 feet of the ordinary high water mark of navigable rivers and streams.

810.1.7 Forest Fire Management

810.1.7.1 Uncontrolled Fire Refer to Chapter 600

810.1.7.2 Prescribed Fire

Prescribed burning on the County Forest may play an important role in management. Many of the plant communities present today are the result of wild fires.

As the needs are presented to regenerate or maintain timber types or other plant communities, the Committee will examine the costs and benefits of each opportunity. Increased regulations, the county's cost of completing the burn, and the risk of breakouts and uncontrolled fires will have to be considered with any benefits of vegetation management through prescribed burning.

All prescribed burning will be done in accordance with Wisconsin State Statutes 26.12, 26.14, and the DNR Prescribed Burn Handbook 4360.5 and in cooperation with the Department of Natural Resources per section 605.5 of this plan.

810.1.8 Outside Expertise, Studies and Survey

Additional data necessary to make management decisions on the County Forest will be sought from agencies or individuals, who in the Committee's opinion, are best equipped to provide that service. This data will be used as appropriate for management planning.

810.1.8.1 Water Resources

The DNR fisheries biologist and the water management specialist will provide surveys, studies, and technical advice as necessary to prepare and carry out recreational planning affecting waters on the County Forest. (Also see Chapter 840.6).

810.1.8.2 Wildlife Resources

DNR wildlife biologists will implement population and habitat surveys, provide technical advice, and direct assistance needed for wildlife management planning and implementation on County Forest lands. (Also see Chapter 840). Wildlife projects are identified and implemented in collaboration with the County Forest administrator, DNR liaison forester, and the Committee.

810.1.8.3 Soil Resources

Soil maps and surveys prepared by the Natural Resource Conservation Service

530 (NRCS) will be used in various phases of planning.

531

532 810.1.8.4 Mineral Resources

533 The DNR may provide information valuable for management of gravel and other
534 mineral resources (Also see Chapter 515.2).

535

536 810.1.8.5 Wetland Resources

537 Maps prepared by the DNR's Bureau of Fisheries Management and Habitat
538 Protection, may be utilized for identifying wetlands. Although not
539 comprehensive, particularly in forested areas, these maps are a good initial tool
540 for identifying wetlands on County Forest lands. Assistance and technical advice
541 will be requested from the DNR water management specialist when wetlands may
542 be affected by management practices. The Army Corps of Engineers will also be
543 consulted as appropriate. In addition, Wisconsin's Forestry Best Management
544 Practices for protecting water quality will be used. (Also 820.2.2 for further
545 details).

546

547 810.1.8.6 Navigable Streams

548 The DNR's water regulations specialist will be consulted when navigable stream
549 crossings or navigable stream management projects are being planned. (Also see
550 Chapter 840.6.5). Best Management Practices for protecting water quality will be
551 used.

552

553 810.1.8.7 Floodplains

554 Maps prepared by the Federal Emergency Management Agency (FEMA) will be
555 used to identify floodplains. The County zoning staff may be consulted regarding
556 management activities in the floodplain.

557

558 810.1.8.8 Cultural Resources

559 Management planning will take into consideration historical and archaeological

sites. More information may be obtained from the State Historical Society or the DNR's archeologist.

810.1.8.9 Entomology / Pathology

Wisconsin DNR forest pest staff will provide information and consultation as requested by the County. (Also see Chapter 610 for more information on forest pest control.

810.1.8.10 Endangered Resources

DNR endangered resource staff will provide Natural Heritage Inventory (NHI) information and are available for consultation on endangered resources issues.

810.1.9 Local Silvicultural Field Trials

To date, numerous field trials have been completed or are ongoing on the County Forest. These trials include:

1. Tree shelters applied to protect Red Oak seedlings from deer damage.
This trial established in cooperation with the USDA Northcentral Forest Experiment Station.
2. Liquid deer repellent application to White Birch seedlings.
3. Budcapping of Jack Pine, White Pine, Red Pine, and Red Oak seedlings for browse protection by deer.
4. Outplanting of Jack Pine seedlings grown in a deer repellent medium.
This trial is established in cooperation with Wisconsin DNR Hayward Nursery.

A compilation of silvicultural trials on State and County lands is available at <http://dnr.wi.gov/org/land/forestry/sciences/silviculture/index.html>.

810.1.10 Local Citizen Involvement

The Vilas County Forestry, Recreation, and Land Committee is an open forum to listen, evaluate and incorporate, where appropriate, the public's input into management of the County Forest.

820 BIOLOGICAL COMMUNITY TYPES

A community is an assemblage of different plant and animal species, living together in a particular area, at a particular time in specific habitats. Communities are complex and dynamic systems named for their dominant plant species.

Species/community information has been condensed to familiarize the reader with the make-up of the Forest. Refer to Chapter 130.1.4 for more information.

820.1 FORESTED COMMUNITIES

The forested cover types are made up of a variety of size classes (regeneration, sapling-pole, and saw timber) and structure (canopy, layers, ground vegetation, dead and downed material, and inclusions). Forested communities within the Vilas County Forest cover approximately 88% of the Forest.

Forest cover types associated with the County Forest are:

Aspen – 37%. Consisting of primarily aspen species often found in combination with paper birch and red maple

Northern Hardwoods – 5.5%. Consisting of a mixture of upland hardwood species including sugar maple, yellow birch, basswood, ash and red maple.

Oak – 5.5%. Dominated by red oak, white oak, black oak and associated with other hardwoods.

Swamp Hardwoods - .02%. More than 50% swamp hardwood species including black ash, red maple, and elm.

Red Maple - .13%. More than 50% red maple. Often associated with aspen and white birch.

White Pine – 3.6%. More than 50% white pine.

Red Pine – 9.7%. More than 50% red pine.

Jack Pine – 13.6%. More than 50% jack pine.

622 Fir-Spruce - .64%. Consisting of swamp border or upland types with mixed
623 species, predominately balsam fir and spruce associated with white pine, cedar,
624 red maple, aspen, and birch
625 Swamp Conifer - .42%. Lowland type typified by balsam fir, cedar, and spruce in
626 combination with red maple and other lowland hardwoods.
627 Black spruce – 6.9%. More than 50% swamp conifer species with black spruce
628 predominating.
629 Tamarack - 1%. More than 50% swamp conifer species with tamarack
630 predominating.
631 White cedar - .14%. More than 50% swamp conifer species with white cedar
632 predominating.
633 White birch - .34%. Consisting of a majority of white birch. Often found in
634 combination with aspen and red maple.
635

636 820.2 NON-FORESTED COMMUNITIES

637 Non-forested communities within the Vilas County Forest cover approximately
638 12% of the forest. In broad categories, they are: upland (2.3%), wetland (8%)
639 and water (1.7%).
640

641 Non-forested habitats are important components of management within the
642 County Forest. Upland and wetland non-forest types provide important habitat
643 for distinct groups of species.
644

645 The following provides a general description of the non-forested communities:
646

647 820.2.1 Upland Non-Forest (2.3%)

648 Upland Non-Forest areas of the County Forest include:

649 Grass openings – consists of upland grasses, such as brome, quack, bluegrass,
650 timothy, and sedges.
651

Herbaceous vegetation - ground cover predominated by herbaceous species with bracken fern, upland aster, goldenrod, barren ground strawberry, hawkweed, lily of the valley, yarrow, and sarsaparilla.

Shrub openings - primarily upland sites less than 10% stocked with tree species but having 50% or more of the area stocked with taller growing, persistent shrubs. This includes, but is not limited to, shrubs such as hazel, blueberry, junberry, chokecherry, pincherry and willow.

820.2.2 Wetlands (20%)

Wisconsin State Statutes define a wetland as “an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation, and which has soils indicative of wet conditions.”

Wetland communities are recognized to be a complex association of plants and animals, soils and water levels having special natural values. They are fragile systems that undergo rapid degradation when affected by incompatible uses and unskilled management. Wetlands provide many functional values including shoreline and flood protection, water quality protection, groundwater recharge, and animal and plant habitat. Therefore, it is the policy of Vilas County to preserve, protect and manage the wetlands under its jurisdiction in a manner that recognizes the natural values of wetlands and their importance in the environment. To this end the County will:

- 1) Recognize wetland values in management plans, taking reasonable steps to minimize harmful effects.
- 2) Cooperate with the DNR in wetland inventories and in preparation of essential wetland information.
- 3) Maintain control of vital wetlands under its jurisdiction when to relinquish such control would risk substantial site alteration and subsequent degradation of wetland values vital to the area and the state.

- 4) Minimize adverse changes in the quality or quantity of the flow of waters that nourish wetlands.
- 5) Cooperate with local, state and national agencies and citizens to increase understanding of the importance of wetlands and the need for land and water stewardship in guiding development decisions.
- 6) Cooperate with the DNR in wetland management activities that would enhance the quality and diversity of wetlands in the county and the region.

Wetlands are the transitional habitats between upland and aquatic systems where the water table is usually at or near the surface, or where the land is covered by shallow water. They presently make up a total of 20% of the County Forest.

Wetlands are made up of 15 descriptive types (adapted from PUBL-WZ-029-94). They include:

Shallow, open water – wetlands characterized by submergent, floating and floating-leaved aquatic vegetation such as pondweed, water lilies, water milfoil, and duckweed. Water depths are generally less than 6.6 feet.

Deep marshes - wetlands characterized by emergent vegetations such as cattails and pickerel weed and floating leaved plants such as white and yellow water lily and watershield. Water depths of 6 feet are typically found on deep marshes.

Shallow marshes - wetlands characterized by persistent emergent vegetation such as cattails and pickerelweed, etc., and water depths to 1.5 feet.

Sedge meadow - wetlands characterized by sedges and cattails. Surface water depths to 6 inches in winter and early spring, and exposed saturated soil surface in summer.

711 Open bog – wetlands that are composed of living sphagnum moss growing over a
712 layer of acid peat. Herbs and low shrubs colonize the mat and immature or
713 stunted trees of black spruce and/or tamarack may be scattered through the area.

714

715 Coniferous bog – wetlands similar to open bogs, except that mature black spruce
716 and/or tamarack trees are the dominant species growing on the sphagnum moss
717 mat. Black spruce and heath family shrubs are characteristics only of acid peats,
718 whereas tamarack can grow in calcareous peats, such as those of northern white
719 cedar swamps.

720

721 Shrub-Carrs – wetlands composed of tall deciduous shrubs growing on
722 saturated to seasonally flooded soils. They are usually dominated by willow or
723 red-osier dogwood. Non-native shrub species invade shrub-carrs, especially
724 where drainage and pasturing have disturbed the area. In particular, honeysuckle
725 and buckthorn can invade quickly.

726

727 Alder thicket – wetlands similar to shrub-carrs, but dominated by speckled alder.
728 It can also include other shrub species like high bush cranberry and sweet gale.

729

730 Lowland hardwood swamp – wetlands dominated by deciduous hardwood trees.
731 Soils are saturated during much of the growing season, and may be
732 inundated by as much as a foot off standing water. Species include black ash, red
733 maple, yellow birch, and northern white cedar.

734

735 Coniferous Swamp – wetlands dominated by lowland conifers, primarily black
736 spruce, northern white cedar and tamarack. Soils are saturated during much of the
737 growing season and may be inundated by as much as a foot of standing water.
738 Soils are usually organic. A sphagnum moss mat is not present.

739

740 Floodplain forest – wetlands dominated by mature, deciduous hardwood trees
741 growing on alluvial soils associated with riverine systems. These wetlands often

occur in the backwaters and depressions of rivers, which retain water for a long period into the growing season. Typically they include northern and southern wet-mesic hardwood forest associations. Floodplain forests support diverse plant and animal species because they serve as migration corridors.

820.2.3 Open Water Habitats (1.7%)

Open water habitats are permanently flooded lands below the deep-water boundary of wetlands. Water is generally too deep to support emergent vegetation. Presence of these aquatic habitats within a forest landscape greatly increases the number of wildlife species that can potentially occur. They include rivers, lakes, and streams and occur on 1.7% of the forest landscape. They are broken down into:

Lakes - lakes, ponds, and flowages in excess of 40 acres in an area; or rivers in excess of 1/8 of a mile in width.

Streams - intermittent or permanent watercourses with slow water velocities and are usually defined as being less than 1/8 mile in width.

Rivers - wetlands and deep-water habitats contained in a channel through which the water flows and associated with forested riparian zones.

830 PLANT COMMUNITIES MANAGEMENT

Vilas County recognizes the importance of maintaining the diversity of the Forest under an ecosystem approach. The process involved in making management decisions to encourage, or not to encourage, specific species or communities is complex. It includes an understanding of:

- Objectives of the County Forest.

- Integration of the National Hierarchical Framework of Ecological Units (NHFEU - landforms, soils, climate, vegetation classification at multiple scales).
- Application of habitat type classification to identify ecological potentials and silvicultural alternatives.
- Past, present, and future desired condition.
- Surrounding ownership patterns and their generalized objectives.
- Socio-economic needs.

830.1 SILVICULTURE

Plant communities are normally managed within the guidelines found in the Wisconsin Department of Natural Resources. Silviculture and Forest Aesthetics Handbook 2431.5. Silviculture is the practice of controlling forest composition, structure, and growth to maintain and enhance the forest's utility for any purpose. Typically, silvicultural guidelines are written to encourage a stand to contain the greatest quality and/or quantity of timber under either an even-, or uneven-aged system.

A summary of management on the Vilas County Forest is described as follows:

830.1.1 Aspen Management

Aspen is the most abundant timber type on the Vilas County Forest, occupying 14,941 acres. The Aspen stands managed today originated after the logging and wildfires of the late 1800's through the early 1900's. The generation of Aspen established at that time matured and was harvested by the mid to late 1990's. Aspen management for the period of this Plan considers the beginning of the harvest of the second generation of established Aspen stands.

Although the Aspen resource in the Northern Great Lakes Region has been steadily declining since the 1960's, it is the only region in the United States where there is a significant amount of this timber type. This reduction of Aspen is due

to the lack of harvests and selection harvests that discriminate against Aspen, both leading to the natural succession to more shade tolerant species.

Because Aspen provides habitat values to a wide variety of wildlife and is an important species for the wood products industry, the Vilas County Forest is committed to maintaining its Aspen acreage. Silviculture of Aspen is characterized by regenerating mature stands by use of the clearcut method with consideration given to aesthetics, wildlife habitat, and a goal of moving toward regulation of the harvest by attaining equal acreages in each stage of growth. It is recognized that as the second generation of Aspen matures there will be opportunities, at the time of harvest, to naturally convert a portion of some stands to White Pine. Conversion opportunities will be considered on a case by case basis and are not anticipated to have an appreciable effect on maintaining the current Aspen timber type of 14,941 acres.

830.1.2 Jack Pine Management

Jack Pine occurs throughout the Vilas County Forest on sandy soils. The establishment of Jack Pine on these soils naturally followed the severe fires of the late 1800's and early 1900's. During the late 1930's and early 1940's plantations of Jack Pine were established by the Civilian Conservation Corps in the aftermath of wildfires and failed farms.

Due to the characteristics of being shade intolerant and short lived there is a decline of the presence of Jack Pine in the region of the Northern Great Lakes as stands are converting to other species. Because of the regional decline of this timber type and the characteristics of Jack Pine to withstand frost and droughty soils, it is the goal of the Vilas County Forest to maintain the acres of Jack Pine type with minimal conversion to other species. There are 5,491 acres of Jack Pine timber type currently within the Forest.

Silviculture of Jack Pine on the Vilas County Forest is even-aged, characterized by clearcutting to provide the exposure to sunlight needed for regeneration and growth and planting combined with natural seeding to regenerate the stands. The use of herbicide is, at times, necessary to reduce competition, ensure seedling survival, and eliminate the conversion of stands to other species.

810.1.3 Red Pine – White Pine Management

The Vilas County Forest is unique among public forests of Wisconsin, having 2,902 acres of natural stands of Red and White Pine. These natural stands primarily originated from 1896-1920 after the indiscriminate logging and wildfires of that era. Additionally the Civilian Conservation Corps established plantations in the late 1930's on lands where wildfires and failed farms once were. From 1940-1980 the establishment of Red Pine plantations continued in non-forested areas; however, planting was infrequent. Beginning in 1980 an annual effort was made to establish trees in the remaining non-forested areas as well as convert some harvested stands of Jack Pine and White Birch to Red Pine. Plantation establishment continued through the 1990's to 2000 with an emphasis on diversity, mixing Red Pine, White Pine, White Spruce, and Tamarack. After 2000, opportunities for the establishment of new stands of Red and White Pine have declined with the planting of open areas of upland accomplished and the completion, for all practical purposes, of the harvest of the White Birch timber type. Future additions to the Red and White Pine timber type will be the natural conversion of portions of Aspen stands and possible conversion opportunities in the Red Maple timber type. There are currently 5,336 acres of Red and White Pine timber type.

Silviculture of Red and White Pine stands is conducted as typical even-aged management, where trees are selected to remain in the stand or be harvested according to their risk, their place in the canopy, and spacing of the crowns of the residual trees. During the period of this Plan as improvement thinnings are conducted in natural stands with a White Pine component, the decision will be

made to initiate White Pine regeneration and move toward a two-aged stand. This may include post-sale treatments to encourage natural reproduction and/or prepare the site for planting. Herbicide treatment may be necessary to reduce competition prior to scarification. This same management outline will be considered for some Red Pine plantations after a third thinning is conducted. Current thought is to harvest crop trees at 130 years of age. However, aesthetics and age class distribution of the resource may influence retention beyond 130 years for some stands, if possible.

830.1.4 Oak Forest Cover Types

A main goal of Vilas County's Landscape objective is to maintain and improve species diversity across the County Forest. In regard to this objective, Vilas County intends to maintain the current acres of Oak type on the County Forest. Currently only 5% of the forest acreage is Oak type. The Oak Forest Cover types are primarily made up of one of two oak types on the Vilas County Forest, Northern Red Oak (*Quercus rubra*) on higher quality sites and habitat types and the scrub oak type on sandy soils and poorer habitat types. The scrub oak type on the Vilas County Forest generally consists of Northern Pin Oak (*Q. ellipsoidalis*), and Northern Red Oak hybrids; a cross between Northern Red Oak and Northern Pin Oak. Oak is a moderately shade tolerant species scattered throughout the county forest. Oak forests generally require a significant disturbance event such as fire or blow-down and fire to regenerate and develop. In the absence of management or disturbance, red oak stands tend to convert to other, more shade tolerant hardwood species or white pine. Much of the current oak developed during the large scale cutover and wildfire era in the early 1900's. This forest type has high value to a wide number of game and non-game wildlife species.

General Management Prescriptions

The general management objective within the oak types is to maintain oak to produce the maximum quantity and quality of sawtimber and veneer within ecological and economic limitations and maintain its wildlife and mast producing

benefits. Long-term management objectives are to maintain the Oak timber type based on site quality and to use silvicultural treatments that will take advantage of current stand opportunities to facilitate regeneration or conversion to other types while maintaining a prominent component of oak. Intermediate thinnings will be used to develop oak stands and to maximize the quantity and quality of a stand's oak component. Shelterwood cuts will be used to regenerate oak stands as they near either economic or ecological limitations, depending on site characteristics and individual stand needs. Oak is typically regenerated through the shelterwood method and will generally take place at 90-150+ years of age. In a shelterwood harvest, about 30-40% of the mature trees are harvested, depending on site characteristics, to allow for sunlight and the regeneration of young oak trees. After the young oak trees have regenerated, about 10 to 15 years later, the majority of the mature trees are harvested, while maintaining 5 to 10 old trees per acre for age and structural diversity and wildlife. Other management techniques that may be applied when needed include single-tree selection, clear-cuts with reserves, scarification, hand-release and herbicide treatments to promote regeneration. Planting oak with herbicide treatments and browse deterrent methods may also be employed. In mixed stands of red oak with white pine, northern hardwoods or other species manage to promote components of older long-lived trees and natural regeneration of these species and other secondary species. On nutrient poor droughty soils with scrub oak stands, use clearcutting to regenerate a component of oak along with aspen/white birch/jack pine.

830.1.5 Northern Hardwoods

Northern Hardwood Forests on the Vilas County Forest generally consist of hardwood species that are moderately to highly shade tolerant. Predominant species include sugar maple (*Acer saccharum*), basswood (*Tilia americana*), red maple (*Acer rubrum*), white ash (*Fraxinus americana*), and yellow birch (*Betula allegheniensis*), with sugar maple being the dominant tree species in all stands. Associated species may include the following: black cherry (*Prunus serotina*), white pine (*Pinus strobus*), balsam fir (*Abies balsamea*), hemlock (*Tsuga*

canadensis), white spruce (*Picea glauca*), northern red oak (*Quercus rubra*), and white birch (*Betula papyrifera*). Much of the current northern hardwoods developed during the large scale cutover and wildfire era in the early 1900's, creating the mostly even-aged northern hardwoods that we have on the forest today. The majority of Vilas County's northern hardwood stands are located in the northwest portion of the County Forest. Most northern hardwood species are light seeded and range from shade tolerant (sugar maple) to intermediate shade tolerant (white ash). Red maple and basswood are capable of proliferating from stump sprouts. This forest type is generally managed as an all-aged forest stand. Most of the hardwoods will be managed with the goal of maximum production of high quality hardwood sawtimber; all-age management is the preferred method to diversify tree ages, sizes and types of tree species within each stand.

General Management Prescriptions

Once stands reach an all-aged structure, Vilas County will use selection harvest (uneven aged management) as the primary management tool, and vary harvest intensity according to site-specific conditions and needs. Vilas County will plan harvests to maintain or increase species diversity in these stands. Stands will be evaluated for silvicultural needs, regeneration, spacing, density and other stands conditions every 12-20 years or when basal area reaches 120 square feet per acre. Uneven aged management guidelines call for thinning to a residual basal area of approximately 80 square feet per acre, removing high risk, cull, and over-mature trees. Thinning guidelines also target spacing and removing trees in overstocked diameter classes.

Depending on the site conditions and objectives of a particular stand, more intensive silviculture systems such as shelterwood harvest, group selection, or gap creation may be used. These techniques may be applied to an entire stand or to parts of a stand in conjunction with a selection harvest.

Stands without sufficient crop trees may be considered for even aged management. The latest research in northern hardwood management encourages

the use of even-age management when appropriate. Since the term even-age management may be somewhat confusing to hardwood managers, some explanation is necessary. Even-age management, as used in northern hardwoods, refers to a system of management in which the entire stand is regenerated at one time as a result of a regeneration harvest, whether it is a shelterwood or group selection harvest operation. In this context even-age management may lead to an eventual "clearcut" but not as traditionally practiced. Situations most likely to call for even-age management are encountered when dealing with stands without sufficient crop trees, stands on the dry-mesic habitat types, or when attempting to regenerate intermediate shade tolerant species like white ash and black cherry or relatively light-seeded species such as yellow birch, ash and red maple.

In addition, an intermediate even-age management practice will often be used for initial thinnings in pole stands even though the long-term objective is all-age management. A northern hardwood stand is defined as currently being even-aged when the average DBH is less than 9.0 inches and when basal area in sawtimber trees, 11 inches DBH and up, is less than 50 sq. ft. per acre. Stands regarded as even-aged by this definition may be thinned to lower basal area levels. Vilas county forest managers have the option of switching from even-age to all-age management at any subsequent thinning. Northern hardwood stands are considered to be an important cover type on the Vilas County Forest and efforts should be made to assure it is retained on the landscape.

830.1.6 Black Spruce and Tamarack – Forest Types

Black spruce and tamarack forest cover types make up 8% of the Vilas County Forest. These forest types are typically on wetland areas and are sometimes referred to as swamp conifers. They can be pure stands of individual species or combinations of two or more tree species, mainly black spruce and tamarack but stands may contain white cedar, balsam fir, jack pine and other associated tree species. A main goal of Vilas County's Landscape Objective is to maintain and improve species diversity across the County Forest while at the same time maintaining black spruce and tamarack forest cover types on sites where they

currently exist. Vilas County will emphasize age class diversity and promote improved species composition through regeneration of tamarack and black spruce thereby improving spruce grouse (*Dedragapus canadensis*) habitat. Black spruce and tamarack will be managed for production of the maximum quantity of pulpwood and sawtimber where possible and permissible under wetlands protection restrictions. Management concerns of special importance for lowland forest types include Best Management Practices (BMP's) for water quality, endangered resources, biodiversity, wildlife, and aesthetics. Management activities will be limited within commercially unproductive wetlands with small sized slow growing trees, or areas of open bog and marsh. Access across these stands on a frozen ground temporary road may be required. Regeneration of productive stands of tamarack and black spruce may be by even-aged management techniques (clear-cut) following the guidelines in the DNR Silvicultural and Forest Aesthetics. In sensitive areas with deep organic soils and reduced risk of windthrow, uneven-aged management through selective harvesting may provide an alternative. Timber harvests on forested wetlands will be conducted only on frozen ground conditions or when there is sufficient snow cover to prevent rutting and potential damage to organic soils. Vilas County will retain all white cedar in timber harvests of forested wetlands.

830.2 LOCALLY UNCOMMON TREES

The presence or lack of a particular plant species is dependent on the land's capabilities, climate, and natural (e.g. fire, browsing) and/or man-caused (e.g. logging, farming) disturbances. The present scarcity of the listed species makes them a source of concern.

The following are considered uncommon on the Forest and perhaps to some extent across the regional landscape:

830.2.1 American elm (*Ulmus americana*) is scarce primarily due to mortality caused by the introduction of Dutch elm disease. [Existing elm will normally be left uncut in hopes that they may continue in the landscape as potential resistant seed source

individuals. Where possible during silvicultural operations, efforts will be made to encourage regeneration of American elm.]

830.3 Trees Locally Difficult to Regenerate

There are certain tree species whose home ranges are within the County Forest that are difficult to regenerate. In many cases this difficulty is related to the exclusion of fire from the environment. In other cases this may be due to browsing by deer. The following species, normally found within the county, are found to be difficult to regenerate:

830.3.1 White birch (*Betula papyrifera*)

The White birch, a symbol of our northern forest, is a shade intolerant species found in even-aged stands. The White Birch stands on the Vilas County Forest were established in the early 1900's after the logging and fires of that era. The stands matured and, for all practical purposes, were harvested by the mid 1990's. These stands were converted primarily to Aspen and Pine. Approximately 212 acres of White Birch stands remain today in aesthetic and riparian management zones.

Silvicultural systems of the seed tree or shelterwood method coupled with site preparation or planting have been successful for seedling production. However, high deer populations have prevented stand establishment. Currently, trials with deer repellant and budcaps have been initiated on the County Forest to prevent deer browsing. White Birch management opportunities today are confined to aesthetic zones, along the County Forest roadsides, and in mixing seedlings with other species in plantations to provide diversity and mimic natural stands of associated trees.

1053 830.3.2 Eastern Hemlock (*Tsuga Canadensis*) and Yellow Birch (*Betula*
1054 *alleghaniensis*)
1055 Eastern Hemlock and Yellow Birch exist on the Vilas County Forest primarily as
1056 a component of Northern Hardwood timber types. Regeneration of both species
1057 is practically non-existent and difficult to achieve due to high deer populations.
1058 Fencing for deer exclusion has been successful to protect plantings or natural
1059 regeneration; however, fencing is costly and impractical on a large scale. For
1060 these reasons, the current management objective for these species is passive,
1061 retaining the trees to provide a seed source as well as maintain diversity in the
1062 Northern Hardwoods timber type that is dominated by Sugar Maple.

1063
1064 830.3.3 White Cedar (*Thuja occidentalis*)
1065 There are 48 acres of the Cedar timber type on the Vilas County Forest. Cedar is
1066 also found as a component in the Swamp Hardwood and Swamp Conifer timber
1067 types. Most stands of Cedar are small (less than 20 acres) in size and have origins
1068 dated to around 1900. However, a Cedar stand in Sec. 15, T40N – R9E is dated at
1069 150 years old. Regeneration is non-existent and difficult to achieve without
1070 controlling browsing by deer. Experiments incorporating deer fence have shown
1071 Cedar can be successfully regenerated. However, the investment is excessive for
1072 the Vilas County Forest to undertake on a meaningful scale. Cedar, therefore, is
1073 not harvested on the County Forest except where trees are dying; for example,
1074 where beaver activity has caused flooding that in turn kills the trees.
1075

830.4 EXOTIC PLANT SPECIES OF CONCERN

Exotic or non-indigenous invasive plant species can cause significant ecological and economic damage to the Forest. Some invasive species, such as common and glossy buckthorn, eliminate not only wildflowers but also limit the regeneration of tree species. Keeping them from dominating the understory is critical to the long-term health and economic viability of the forest. Currently, Vilas County Forest has few significant infestations of invasive plants. With training, vigilance, and control efforts, new infestations can be managed or eliminated. There are many highly invasive plants that are threatening to invade much of the northern forests in Wisconsin. The following is a list of non-native invasive species that pose a threat to Vilas County:

- | | | |
|----------|----|---|
| Aquatic: | 1. | Eurasian water milfoil <i>Myriophyllum spicatum</i> |
| | 2. | Curly-leaved pondweed <i>Potamogeton crispus</i> |
| Upland: | 1. | Common buckthorn <i>Thamnus cathartica</i> |
| | 2. | Asiatic bush honeysuckles <i>Lonicera</i> spp |
| | 3. | Garlic mustard <i>Alliaria petiolata</i> |
| Wetland: | 1. | Phragmites or Common reed grass <i>Phragmites australis</i> |
| | 2. | Reed canary grass <i>Phalaris arundinacea</i> |
| | 3. | Glossy buckthorn (also grading into upland forests) |
| | | <i>Rhamnus frangula</i> |
| | 4. | Purple loosestrife <i>Lythrum salicaria</i> |

830.5 LEGALLY PROTECTED PLANT SPECIES

There are some plants in Wisconsin that are afforded protection under the Federal Endangered Species Law, the State Endangered and Threatened Species Law (s. 29.604 Wis. Stats. and NR 27 Wis. Adm. Code), or both. Under Wisconsin State Law, no one may possess or sell any wild plant that is listed without a valid endangered or threatened (ET) species permit. On public lands or lands one does not own, lease or have permission of the landowner, one may not cut, root up, sever, injure, destroy, remove, transport, or carry away a listed plant without an ET species permit. There is an exemption on public lands for forestry, agriculture and utility activity under the state law.

1107 In the Natural Heritage Inventory (NHI) program the DNR tracks information on
 1108 these species in the State. Below is a list of legally protected plants known to
 1109 occur in Vilas County (on or near the County Forest).

1110	<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
1111	Fairy Slipper	Calypso bulbosa	THR
1112	Shore Sedge	Carex lentifularis	THR
1113	Small Yellow Water Crowfoot	Ranunculus gmelinii	END
1114	Key: THR=Threatened; END=Endangered		

1115

1116 830.6 OTHER PLANT SPECIES AND NATURAL COMMUNITIES OF CONCERN
 1117 – NHI

1118 The NHI program at the DNR also tracks information on rare species and natural
 1119 communities, in addition to legally protected species.

1120

1121 830.6.1 Special Concern Plants

1122 Special Concern Species are those species in which some problem of abundance
 1123 or distribution is suspected, but not yet proven. The main purpose of this category
 1124 is to focus attention on certain species before they become threatened or
 1125 endangered. Below is a list of Special Concern plant species known to occur in
 1126 Vilas County (on or near the county forest).

1127	<u>Common Name</u>	<u>Scientific Name</u>
1128	Sparse-flowered Sedge	Carex tenuiflora
1129	Robbins' Spikerush	Eleocharis robbinsii
1130	Canada Mountain-ricegrass	Oryzopsis candensis
1131	Leafy White Orchis	Platanthera dilatata
1132	Large Roundleaf Orchid	Platanthera orbiculata
1133	Water-thread Pondweed	Potamogeton diversifolius
1134	Common Bog Arrow-grass	Triglochin maritime
1135	Hidden-fruited Bladderwort	Utricularia geminiscapa
1136	Purple Bladderwort	Utricularia purpurea
1137	Northeastern Bladderwort	Utricularia resupinata

1138 830.6.2 Natural Communities
1139 Similarly, specific records of natural communities are also tracked. The
1140 following natural communities have been recorded in Vilas County (on or near
1141 the County Forest).

1142 Common Name

1143 Alder thicket
1144 Black Spruce swamp
1145 Lake – deep, soft, seepage
1146 Lake – shallow, soft, seepage
1147 Northern dry – mesic
1148 Northern sedge meadow
1149 Northern wet forest
1150 Open Bog
1151 Spring Pond
1152 Stream – fast, hard, cold
1153 Stream – slow, soft, cold

1154

1155 **840 WILDLIFE SPECIES MANAGEMENT**

1156

1157 840.1 BACKGROUND

1158 For the purpose of this plan, wildlife will include all native birds, mammals, fish,
1159 amphibians, reptiles, and insects with a strong focus on the natural communities
1160 in which they live. Wildlife biologists will emphasize habitat management that
1161 interrelates and benefits wildlife, and complements sound forestry practices.
1162 Concerns about the biological diversity of the County Forest and how it fits into
1163 the regional, continental and global perspective, may cause wildlife management
1164 to place increased emphasis on segments of the forest community. Practices such
1165 as old growth, snag and den tree management, access management, forest
1166 openings maintenance, oak management, and aspen maintenance, can be priorities
1167 in the dynamics of forest management. A primary goal of wildlife management
1168 on the Vilas County Forest is to provide a diversity of healthy ecosystems

1169 necessary to sustain native populations for their biological, recreational, cultural
1170 and economic values.

1171

1172 840.1.1 Technical Planning

1173 Planning will be a cooperative effort of the administrator, DNR liaison forester
1174 and wildlife biologist in formulating management plans and utilizing wildlife
1175 management techniques for the overall protection and enhancement of the forest
1176 community, of which wildlife is a key component.

1177

1178 840.1.2 Guidelines

1179 DNR manual codes on Endangered and Threatened Species Permits Issue
1180 (1724.5), Feasibility Studies and WEPA Analyses for Establishing or Modifying
1181 Property Project Boundaries (2105.1), Guidelines for Defining Forest-Wildlife
1182 Habitat Management (2112), Forest Opening Maintenance and Construction
1183 (2112.1), and the Public Forest Lands Handbook (2460.5), are important
1184 references and guidelines in wildlife planning efforts.

1185

1186 840.1.3 Inventory

1187 Habitat needs will be determined by analysis of forest reconnaissance
1188 information. Population estimates will be conducted periodically by DNR
1189 wildlife, endangered resources personnel, and other trained cooperators.

1190

1191 840.2 RESOURCE MANAGEMENT AND AREAS OF FOCUS

1192 In applying this Plan to the forest, the following areas of focus were identified in
1193 achieving Plan objectives:

1194

1195 840.2.1 General Management Policies

1196 Forest management practices may require modification to benefit wildlife and
1197 biodiversity in certain situations. The following will be considered in forest
1198 management planning:

1199 1) Even-aged regeneration harvests (clearcuts) should vary in size and shape.

- 1200 2) A diversity of stand age, size and species.
- 1201 3) Mast-bearing trees and shrubs, den trees, and an adequate number and
- 1202 variety of snags.
- 1203 4) Cull trees (future snag or den trees) not interfering with specific high value
- 1204 trees.
- 1205 5) Timber types, habitat conditions and impacts on affected wildlife.
- 1206 6) Access management.
- 1207 7) Best management practices for water quality (BMP's).
- 1208

1209 840.2.2 Tree Retention Guidelines

1210 The Vilas County Forest Tree retention guidelines are adopted to aid the

1211 implementation of the management objectives of providing biologic diversity,

1212 visual aesthetics, water & soil quality, and to maintain certain landmarks. The

1213 Vilas County Forest Tree Retention Guidelines are referenced in Chapter 900-80.

1214

1215 840.3 HABITATS OF IMPORTANCE

1216 Important habitat types are those cover types known to be of importance to certain

1217 native wildlife and whose absence would make that wildlife significantly less

1218 abundant. These shortages may be on a local or broader scale. The following

1219 habitat types can be considered important:

1220

1221 840.3.1 Aspen

1222 The aspen type is recognized as providing habitat values to a wide variety of

1223 wildlife species. This type will continue to be regenerated, with consideration

1224 given to reserving scattered den and mast-producing trees in the process.

1225

1226

1227

1228 840.3.2 Jack pine

1229 Jack pine and its associated plant understory provide a vital mix of breeding and

winter habitat for many wildlife species. This type will become increasingly

1230 important on the Forest as conversion to other tree species occurs on private
1231 lands. Jack pine habitat maintenance will be a high priority.
1232

1233 840.3.3 Forest openings
1234 Permanent grass openings are essential to well-balanced wildlife habitat.
1235 Openings will be maintained where they exist or be developed where needed.
1236

1237 840.3.4 Lowland conifer
1238 Cedar, hemlock, and balsam fir types are important for winter cover for many
1239 wildlife species. These forest types will be maintained where practical.
1240

1241 840.3.5 Oak
1242 The oak type is important to wildlife because of its cavity-forming potential and
1243 mast production. Future management will focus on protecting and regenerating
1244 this type.
1245

1246 840.3.6 Forest Game Species
1247 The management of forest game (white-tailed deer, ruffed grouse, black bear,
1248 turkey, snowshoe hare, and numerous furbearers) is centered on maintaining early
1249 successional species such as aspen, jack pine, white birch, and scrub oak; with
1250 aspen and oak being the primary species of importance.
1251

1252 Manual Code 2112 is a Wisconsin DNR document that establishes guidelines for
1253 measuring forest game habitat. It has been used like a barometer to measure
1254 changes in forest wildlife habitat. While the scope of Manual Code 2112 can be
1255 narrow (deer habitat units compared with landscapes and ecoregions), by today's
1256 management standards, the impacts are broad.
1257

1258 Foresters, in concert with wildlife biologists, will continue to monitor forest game
1259 species and adjust land management prescriptions where appropriate.
1260

1261 840.3.7 Forest Non-Game Species
1262 Efforts will be made with the DNR to inventory existing populations, identify
1263 needs, and maintain valuable habitat types. Consideration will be given to
1264 maintain large dead and dying trees within timber management areas to provide
1265 habitat for cavity-dwelling wildlife and provide a source of large woody debris for
1266 amphibians.

1267

1268 840.3.7.1 Neotropical Migrant Birds

1269 Neotropical migrant birds (NTMB) are songbirds that breed in North America and
1270 winter in Central and South America. There are over 120 species of NTMBs that
1271 spend a portion of each year in Wisconsin. Different NTMBs utilize a wide
1272 variety of habitats including forests, shrubs, and grasslands. Warblers, tanagers,
1273 vireos, thrushes, swallows, blue-winged teal and hummingbirds are just some
1274 examples of NTMBs. In addition, these species play an important role in forest
1275 health by consuming large amounts of insects, including forest pest species such
1276 as gypsy moths and forest tent caterpillars.

1277

1278 In recent years, several neotropical species have experienced significant declines
1279 in population. These declines likely reflect a reduction in suitability, or a loss of
1280 habitat where these species breed, overwinter and/or migrate. Grassland birds
1281 seem to be experiencing the most precipitous declines range wide, due to a loss of
1282 habitat both in North America and on the wintering grounds in South America.
1283 However, species that nest in forests or shrublands, such as the cerulean warbler,
1284 golden-winged warbler, and veery are also declining nationwide.

1285

1286 In some cases these declines may be tied to forest fragmentation. Forest
1287 Fragmentation occurs when portions of a forest are converted into non-forest
1288 cover types (urbanization and agricultural). This is permanent fragmentation and
1289 poses the greatest threat to all forest wildlife. Forest Fragmentation has impacts
1290 on neotropical birds including changes in competition for resources, predation
1291 rates, and perceived quality of habitat. Each species of NTMB respond to forest

1292 disturbance differently. Since there are so many neotropical migrants that utilize
1293 a wide variety of habitats and successional stages it's difficult to make
1294 generalizations as to the impacts of forest management on the health of certain
1295 bird populations. However, the County Forest provides habitat for NTMB's
1296 while being actively managed for 75 years. Species such as chestnut-sided
1297 warblers and mourning warblers benefit from early successional species produced
1298 by clearcutting. Species that rely on more mature forests or interior forests, such
1299 as ovenbirds or black-throated blue warblers, will benefit from thinnings and all
1300 age management. To assure a rich diversity of NTMBs in Wisconsin's forests,
1301 emphasis should be placed on forest management guidelines that promote habitat
1302 for NTMBs with the most specialized habitat needs.

1303
1304 Forests and associated wetlands of the western Great Lakes, including Wisconsin,
1305 support some of North America's highest densities and most diverse assemblages
1306 of breeding birds (Howe et al. 1996). While some forest/shrub species mentioned
1307 above are decreasing, according to the Federal Breeding Bird Survey (BBS), the
1308 majority of forest/shrub species that breed in Wisconsin are increasing.
1309 Wisconsin's private, County, State, and National Forests are still relatively intact
1310 and have regained much of their structural and compositional diversity that was
1311 once reduced in the big "Cutover" in the early 1900's.

1312
1313 As habitat is lost and fragmented by development on private lands, Wisconsin's
1314 County Forests continue to provide increasingly important habitat to numerous
1315 NTMB species that occur in a wide variety of forest types and age classes.

1316

1317 840.4 LEGALLY PROTECTED ANIMAL SPECIES

1318 The Federal Endangered Species Act of 1973 and the Lacey Act together provide
1319 for the protection of wild animals threatened with extinction. The State
1320 Endangered and Threatened Species Law also requires that the State assume
1321 responsibility for conserving wild animals by restricting and regulating the taking,
1322 possession, transportation, processing, or sale of endangered or threatened wild

1323 animals within its jurisdiction. Further, the Federal Migratory Bird Act and the
 1324 Eagle Protection Act provide additional protection for certain species of birds.
 1325 Because animals usually travel freely from one property to another, they belong to
 1326 everyone. Therefore, if a species is legally protected, it is protected anywhere it
 1327 occurs in Vilas County.

1328

1329	<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
1330	Wood Turtle	Clemmys insculpta	THR
1331	Cerulean Warbler	Dendroica cerulean	THR
1332	Spruce Goose	Falcapennis canadensis	THR
1333	Bald Eagle	Haliaeetus leucocephalus	SC
1334	Greater Redhorse	Moxostoma valenciennesi	THR
1335	American Burying Beetle	Nicrophorous americanus	END
1336	Osprey	Pandion haliaetus	THR

1337

1338 Key – Status: END-endangered, THR-threatened, SC-special concern

1339

1340 840.5 OTHER ANIMALS OF SPECIAL CONCERN – NHI

1341 Just as with plants, the DNR tracks information on rare animal species when some
 1342 problem of abundance or disturbance is suspected but not yet proven. The main
 1343 purpose of this category is to focus attention on certain species before they
 1344 become threatened or endangered. Below is a list of Special Concern animal
 1345 species known to occur in Vilas County (on or near the County Forest).

1346

1347	<u>Common Name</u>	<u>Scientific Name</u>
1348	Elktoe	Alasmidontya marginata
1349	Freija Fritillary	Boloria freija
1350	Frigga Fritillary	Boloria frigga
1351	Swainson's Thrush	Catharus ustulatus
1352	Lake Herring	Coregonus artedi
1353	Black-throated Blue Warbler	Dendroica caerulescens

1354	Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>
1355	Red-disked Alpine	<i>Erebia discordatis</i>
1356	Splendid Clubtail	<i>Gompurus lineatifrons</i>
1357	Skillet Clubtail	<i>Gompurus ventricosus</i>
1358	Connecticut Warbler	<i>Oporornis agilis</i>
1359	Gray Jay	<i>Perisoreus canadensis</i>
1360	Black-backed Woodpecker	<i>Picoides arcticus</i>
1361	Round Pigtoe	<i>Peurobema sintoxia</i>
1362	Boreal Chickadee	<i>Poecile hudsonica</i>
1363	Bullfrog	<i>Rana catesbeiana</i>
1364	Lake Emerald	<i>Somatochlora cingulata</i>
1365	Ski-tailed Emerald	<i>Somatochlora elongate</i>
1366	Arctic Shrew	<i>Sorex arcticus</i>
1367	Zebra Clubtail	<i>Stylurus scudderri</i>

1368

1369 840.6 FISH AND WATERS MANAGEMENT

1370 Public waters shall be managed to provide for optimum natural fish production,
 1371 an opportunity for quality recreation, and a healthy balanced aquatic ecosystem.
 1372 Emphasis will also be placed on land-use practices that benefit the aquatic
 1373 community. Management of County Forest lands will attempt to preserve and/or
 1374 improve fish habitat and water quality.

1375

1376 840.6.1 Technical Planning

1377 Management of all waters within the County Forest is the responsibility of the
 1378 DNR. Technical assistance will be provided by the local fisheries biologist.
 1379 Studies and management will be conducted in the manner described in DNR Fish
 1380 Management Handbook 3605.9.

1381

1382 840.6.2 Water Surveys

1383 Comprehensive lake and stream surveys on the County forest will be conducted
 1384 by the DNR fisheries biologist as required. The publication, "Surface Water

1385 Resources of Vilas County”, contains additional information relative to these
1386 waters.
1387

1388 840.6.3 Population Surveys

1389 Surveys of fish populations in waters within the County Forest will be conducted
1390 by the DNR as required and will generally run concurrently with water surveys.
1391 Fish management programs will be guided by these surveys.
1392

1393 840.6.4 Lake Management

1394 Management of lakes within the County Forest will be consistent with the
1395 capability of the resource and any unique aspects associated with that resource.
1396

1397 840.6.5 Stream Management

1398 Trout streams on the County Forest will be managed to protect and enhance their
1399 quality. Streams containing warm water or cool water species will be managed to
1400 perpetuate their inherent qualities. Corresponding land and water use practices
1401 will be consistent with this policy. Maps inventorying water resources can be
1402 found in the appendix to this plan (Chapter 900).
1403

1404 840.6.6 Best Management Practices for Water Quality

1405 Protection of water resources in the county will be consistent with the “Wisconsin
1406 Forestry Best Management Practices (B.M.P.s) for Water Quality”. Examples of
1407 these protective measures are:

- 1408 1. Uncut riparian zones
 - 1409 2. Erosion control measures
 - 1410 3. Stream bank protection
- 1411
1412

1413 840.6.7 Shoreland Zoning

1414 A copy of the Vilas County Shoreland Zoning Ordinance is filed at the
1415 Department Headquarters. Vilas County’s Shoreland Zoning Ordinance provides

1416 for more restrictive management than Wisconsin's BMP's in riparian zones. For
1417 example, the 'No Cut' zone along lakes and streams is 75 feet under the Vilas
1418 County Ordinance.

1419

1420 840.6.8 Access and development

1421 Access and development of County Forest waters will be limited to those
1422 activities consistent with the above water management policies. See Chapter 740
1423 also for further information on water access.

1424

1425 840.6.9 Important Water Resources

1426 Management activities adjacent to these water resources, or in areas with sensitive
1427 soils or severe slopes, should consider measures above and beyond the customary
1428 BMP practices. County staff may work with their liaison forester in cooperation
1429 with the local DNR water resources staff to develop site-specific measures where
1430 appropriate. An inventory of water resources can be obtained from DNR Water
1431 staff for the County. Important water resources on the Vilas County Forest
1432 include:

1433

1434 Lakes totally within or having frontage in the County Forest Boundary:

1435	<u>Name</u>	<u>Legal Description</u>
1436	2 Unnamed lakes (in)	T42N – R9E – Sec. 7
1437	White Spruce Lake (in)	
1438	Lake of the Woods (frontage)	T42N – R9E – Sec. 8
1439	Unnamed lake (in)	T42N – R9E – Sec. 17
1440	Unnamed lake (frontage)	
1441		
1442	White Squaw Lake (frontage)	T42N – R9E – Sec. 20
1443	Unnamed lake (in)	T42N – R9E – Sec. 22
1444	Marshall Lake (frontage)	T42N – R9E – Sec. 27
1445	Spring Lake (frontage)	
1446	Little Tamarack Flowage (frontage)	
1447	Unnamed lake (in)	
1448		
1449	Unnamed lake (in)	T42N – R9E – Sec. 29

1450	Unnamed lake (frontage)	T42N – R10E – Sec. 20
1451	Reiter Lake (frontage)	T42N – R10E – Sec. 30
1452	Unnamed lake (in)	T42N – R10E – Sec. 33
1453	Unnamed lake (frontage)	
1454		
1455	Unnamed lake (frontage)	T42N – R10E – Sec. 34
1456		
1457	Unnamed lake (in)	T42N – R10E – Sec. 35
1458	Cigar Lake (frontage)	
1459		
1460	Jim's Lake (frontage)	T41N – R9E – Sec. 5
1461		
1462	Langley Lake (in)	T41N – R9E – Sec. 8
1463	Oscar's Lake (in)	
1464	Carl's Lake (in)	
1465	Gene's Lake (in)	
1466	Unnamed lake (in)	
1467		
1468	Unnamed lake (in)	T41N – R9E – Sec. 10
1469		
1470	Unnamed lake (frontage)	T41N – R9E – Sec. 11
1471		
1472	Snyder Lake (frontage)	T41N – R9E – Sec. 17
1473		
1474	Pollack Lake (in)	T41N – 9E – Sec. 24
1475		
1476	Hunter Lake (frontage)	T41N – R9E – Sec. 25
1477		
1478	Upper Buckatabon (frontage)	T41N – R9E – Sec. 27
1479	Unnamed lake (frontage)	
1480		
1481	McLeod Lake (in)	T41N – R9E – Sec. 34
1482	Unnamed lake (frontage)	
1483		
1484	Mud Lake (in)	T41N – R9E – Sec. 35
1485	Forester Lake (in)	
1486	West Lake (in)	
1487		
1488	Tellefson Lake (frontage)	T41N – R9E – Sec. 36
1489	Deep Lake (in)	
1490	Karen's Lake (in)	
1491	Brazell Lake (frontage)	
1492		
1493	Rangeline Lake (frontage)	T40N – R10E – Sec. 6
1494		
1495	Unnamed lake (frontage)	T40N – R10E – Sec. 9

1496	Scat Lake (frontage)	
1497		
1498	Torch Lake (frontage)	T40N – R10E – Sec. 20
1499		
1500	Hunter Lake (frontage)	T40N – R10E – Sec. 25
1501		
1502	Lake of the Hills (frontage)	T40N – R10E – Sec. 33
1503		
1504	Wood Duck Lake (in)	T40N – R9E – Sec. 30
1505		
1506	3 Unnamed lakes (in)	T40N – R9E – Sec. 28
1507	2 Unnamed lakes (frontage)	
1508		
1509	Snipe Lake (frontage)	T40N – R9E – Sec. 21
1510		
1511	Ewald Lake (in)	T40N – R9E – Sec. 20
1512		
1513	Unnamed lake (in)	T40N – R9E – Sec. 18
1514		
1515	Unnamed lake (frontage)	T40N – R9E – Sec. 16
1516		
1517	Jeb Lake (in)	T40N – R9E – Sec. 15
1518		
1519	Rice Lake (frontage)	T40N – R9E – Sec. 14
1520		
1521	Teepee Lake (frontage)	T40N – R9E – Sec. 12
1522		
1523	Frost Lake (access)	T40N – R9E – Sec. 11
1524		
1525	Honeysuckle Lake (frontage)	T40N – R9E – Sec. 10
1526	Katie Lake (in)	
1527	Unnamed lake (frontage)	
1528		
1529	Aspen Lake (frontage)	T40N – R9E – Sec. 9
1530	Mud Minnow Lake (in)	
1531	Muskellunge Lake (frontage)	
1532		
1533	Sunken Lake	T40N – R9E – Sec. 8
1534		
1535	Unnamed lake (in)	T40N – R9E – Sec. 7
1536	Pincherry Lake (frontage)	
1537		
1538	Cook's Lake (in)	T40N – R9E – Sec. 1
1539	Unnamed Lake (in)	
1540		
1541		<u>Streams and Rivers</u>
1542	Wisconsin River	Muskellunge Creek

1543	Boot Creek	Pickeral Creek
1544	Sucker Creek	Buckatabon Creek
1545	Pioneer Creek	Muskrat Creek
1546	Haymeadow Creek	Tamarack Creek
1547	Unnamed Creek T.41N.-R.10E.-Sec. 27 & 28	
1548		

1549 **850 LANDSCAPE MANAGEMENT**

1550

1551 **850.1 BIOLOGICAL DIVERSITY**

1552 For the purposes of this plan, biological diversity will be interpreted to reference
1553 the variety and abundance of species, their genetic composition, and the
1554 communities, ecosystems, and landscapes in which they occur. It also refers to
1555 ecological structures, functions, and processes that occur in ecosystems to sustain
1556 the system as viable entities. The forest landscape, a mosaic of plants and animals
1557 of various sizes and ages, are in constant flux due to succession from both natural
1558 and planned events.

1559

1560 Opportunities to manage Vilas County Forest lands toward these ends will be
1561 continued and improved, provided they are deemed to be in the public's best
1562 interest by the Committee and within the framework of the County Forest Law
1563 (s.28.11 Wis. Stats.).

1564

1565 **850.2 HABITAT FRAGMENTATION**

1566 The adoption of management plans and strategies developed cooperatively with
1567 neighboring forest owners and managers will help to consider fragmentation on a
1568 landscape level. A continued program of encouraging land acquisition within the
1569 forest blocking will decrease negative impact of forest fragmentation by land uses
1570 other than forestry.

1571

VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

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NEEDS

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1000 OBJECTIVE AND FORMAT

Objectives:

To provide guidelines which define the optimum level of activities that should be undertaken to achieve full potential benefits from the forest.

Format and Policy:

Needs for the county forest shall be listed without regard to budgetary constraints or other limitations. This list shall identify the forest potential in terms of public benefits, investments or opportunities, and financial returns. Silvicultural needs of the county forest are identified in the Forest Compartment Reconnaissance printout. The DNR Public Lands Handbook describes procedures for use of this information. Other needs shall be determined by the Committee and the forest administrator, with technical assistance from the DNR and other interested agencies or individuals qualified to provide such assistance.

1100 DETAILED ANNUAL NEEDS FOR FIFTEEN YEARS

Annual silvicultural needs are identified in the Forest Compartment Reconnaissance printout. The printout, referenced in the plan, is available in the County Forest administrator's office. Printout listings include timber harvests, tree planting, and other silvicultural activities. Other unanticipated needs will be addressed in accordance with procedures outlined in this plan. These items will be identified and plans made for implementation, as part of the annual budget work plan prepared by the administrator and Committee. Annual work plans are approved by the County Board and forwarded to the DNR as required by statute (§28.11(5)(b) and §28.11(5m)(b), Wis. Stats.

1110 TIMBER MANAGEMENT

Timber management activities on the Vilas County Forest are accomplished by Vilas County foresters, WDNR foresters, and through contacting private forest management companies. The objectives of management activities include:

- maintaining and improving forest health
- increasing forest productivity
- providing a sustained, even flow of forest products
- improving and maintaining wildlife habitat
- promoting biological diversity
- improving & maintaining aesthetic conditions.

The Vilas County Forest Reconnaissance, available at the Department Headquarters, provides detailed information on individual forest stands and is the source for identifying and scheduling management activities. Adjustments to the schedule of activities are made annually to reflect current forest conditions and address multiple use concerns. Just prior to the adoption of this plan the statutory planning period requirement was changed from ten to fifteen years. Consequently, harvest projections for the period 2016 – 2020 will be added to this Plan when upgrades to existing technology are provided.

The following is a compilation of the allowable annual harvest for the major timber types on the Forest in regard to the ecology of the species and the characteristics of the soils and sites. Harvest activity from 2016 – 2020 is not expected to change significantly. The location by harvest type is referenced in Chapter 900-78.

<u>Timber Type</u>	<u>Acreage</u>	<u>Avg. Rotation Age</u>	<u>Annual Allowable Regeneration Harvest Acres</u>	<u>Annual Thinning All- Age Management 15 Yr Thinning Interval</u>
Aspen	14,969	55	272	0
White Birch	157	74	1	0
Fir Spruce	259	50	5	17
Red Maple	52	0	0	3
Northern Hdwd	2,212	0	147	145
Oak	2,220	100	21	45
Jack Pine	5,491	50	110	0
Red Pine	3,914	130	30	312
White Pine	1,480	130	11	112
Black Spruce	2,777	100	28	0
Swamp Conifer	169	50	2	0
Swamp Hardwood	8	110	0	0
Tamarack	452	100	5	0
Totals			632	634

It is the goal of the Vilas County Forest to maintain the Jack Pine acreage (5,491 acres) and maintain or slightly increase the Red & White Pine component (5,336 acres) of the Forest. Artificial regeneration (planting & seeding) will vary yearly. Most of the Jack Pine harvest acres will receive site preparation for planting 700 trees per acre, plus natural regeneration. As the natural Red & White Pine stands mature and are harvested, planting, preceded by site preparation, will be the most common regeneration technique used to renew these stands. Planting of Red & White Pine stands will have a stocking goal of 1,200 trees per acre due to the droughtiness of our soils and the subsequent loss of seedlings. Mixed specie stands will be promoted with consideration given to White Spruce, Tamarack, and White Birch where site conditions are conducive. Seeding White Pine to supplement natural seeding will be considered in some harvests of White Pine stands such as shelterwood harvests. It is anticipated 75-150 acres per year for this plan period will be planted and/or seeded. To insure the survival of regenerated stands, site preparation and release techniques using hand tools, machinery, and pesticides will be employed. Plantation survival surveys are conducted each year to determine the need for release or replanting until a plantation is established, usually 3 – 5 years after planting. Survival surveys are currently conducted on 1000 – 1200 acres per year and are expected to reduce to approximately 800 acres per year by 2007.

Beginning in 1980 and continuing through the year 2000 an aggressive effort was made on the County Forest to plant inadequately stocked upland acres left from wildfires and failed farms of the early 1900's and to convert harvested stands of White Birch to conifers, primarily Red Pine, White Pine, and White Spruce. To improve the quality and value of sawlogs produced on the County Forest, pruning is planned for these plantations at the time the first thinning is completed at age 28 – 35 years. Trees to be pruned will be marked or designated. Pruning will be to a height of 17 feet with the date and average stand diameter recorded to provide future buyers a means to estimate the amount of clear wood in the trees at the time they are harvested. Beginning in the year 2008, approximately 150 – 200 acres per year will be evaluated for pruning depending on the completion of thinning and budget constraints.

1200 SUMMARY OF FIFTEEN YEAR NEEDS

A schedule giving a summary of silvicultural needs and other needs for the period covered by this plan, appear as an inclusion in this chapter.

Note: The “Needs” schedule is put together for planning purposes. The best available information has been used in developing the schedule. It is not intended to be followed without modification. Forests are dynamic and managers must be adaptive to change. Funding and staffing shortfalls may also impact the ability of Vilas County Forestry, Recreation, & Land Department to fulfill identified needs. Refer to Chapter 2000 – Annual Work Planning, for reference on progress towards the identified needs in this chapter.

2007 MAJOR NEEDS

Equipment

Trucks: 1992 ½ ton 4 wd replace
Computers/Software: technology upgrades: Arc GIS software;
Wide carriage printer; GPS software;
GPS receiver/recorder

Roads Maintenance

47.7 miles

Land Acquisition

Pickereel Creek omitted lands (BLM)
Pincherry Lake mismeander

Land Entry

Lands acquired listed above
NESE, Sec. 4, T40N – R9E (trade from State)
NESE, Sec. 32, T41N – R10E (trade from State)

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15
Campsite Areas 5
Swimming Beaches 3
Shooting Range 1
Trails: State Funded Snowmobile Trails – 437.6 miles
X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 32.64 miles
Improved Wildlife Openings – 22
Boat Landings – 11
Improved Fishing Sites – 5

2008 MAJOR NEEDS

Equipment

Trucks:	1992 F-350 Landscape, dump, plow	Replace
	1998 ¾ ton 4wd	Replace
Snowmobiles:	2003 Polaris Touring	Replace
Trailers:	2002 snowmobile trailer SS	Replace
Air Photos:		New Flight

Roads Maintenance 47.7 miles

Land Acquisition Scat Lake mismeander

Land Entry Lands listed above

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas	15
Campsite Areas	5
Swimming Beaches	3
Shooting Range	1
Trails: State Funded Snowmobile Trails	– 437.6 miles
X-C Ski Trails	– 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails	– 33.22 miles
Improved Wildlife Openings	– 22
Boat Landings	– 11
Improved Fishing Sites	– 5

2009 MAJOR NEEDS

Roads Maintenance

47.7 miles

Land Acquisition

Land Entry

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.91 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2010 MAJOR NEEDS

Equipment

Snowmobile:	1995 Polaris Widetrack LS	Replace
Mowers:	2004 Kubota 60"	Replace
Picnic Areas:	Camp 12 Lake	Public access by 2010

Roads Maintenance

47.7 miles

Land Acquisition

Land Entry

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas	15
Campsite Areas	5
Swimming Beaches	3
Shooting Range	1
Trails: State Funded Snowmobile Trails	– 437.6 miles
X-C Ski Trails	– 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails	– 32.64 miles
Improved Wildlife Openings	– 22
Boat Landings	– 11
Improved Fishing Sites	– 5

2011 MAJOR NEEDS

Equipment

Trucks: 2002 ¾ ton 4 wd Replace

Air compressor/generator: Replace

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.22 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2012 MAJOR NEEDS

Roads Maintenance

47.7 miles

Land Acquisition

Land Entry

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Establish Campground at Eagle Lake

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

 X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.91 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2013 MAJOR NEEDS

Roads Maintenance

47.7 miles

Land Acquisition

Land Entry

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 32.64 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2014 MAJOR NEEDS

Equipment

Trucks: 2005 ¾ ton 4 wd with service body Replace

Snowmobiles: 2008 (touring, trail inspections) Replace

Trailers: 2008 snowmobile trailer Replace

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.22 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2015 MAJOR NEEDS

Equipment

Trucks:	2005 ¾ ton 4 wd	Replace
Trailers:	1995 10 ton	Replace
Mowers:	1990 Simplicity 42"	Maintenance
	1992 Markmaster Push 20"	Maintenance

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas	15
Campsite Areas	5
Swimming Beaches	3
Shooting Range	1
Trails: State Funded Snowmobile Trails	– 437.6 miles
X-C Ski Trails	– 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails	– 33.91 miles
Improved Wildlife Openings	– 22
Boat Landings	– 11
Improved Fishing Sites	– 5

2016 MAJOR NEEDS

Equipment

Tractor: 2001 Case C460 4 wd with loader 50 pto hp Review

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 32.64 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2017 MAJOR NEEDS

Equipment

Trucks: 2007 ½ ton 4 wd Replace

Mowers: 2010 60" Replace

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.22 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2018 MAJOR NEEDS

Equipment

Trucks: 2008 ¾ ton 4 wd Replace

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.91 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2019 MAJOR NEEDS

Roads Maintenance

47.7 miles

Land Acquisition

Land Entry

Surveys

Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 32.64 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

2020 MAJOR NEEDS

Equipment

Trucks: 2011 ¾ ton 4wd Replace

Roads Maintenance 47.7 miles

Land Acquisition

Land Entry

Surveys Forest Boundary Establishment: 2 – 3 miles

Recreation:

Picnic Areas 15

Campsite Areas 5

Swimming Beaches 3

Shooting Range 1

Trails: State Funded Snowmobile Trails – 437.6 miles

X-C Ski Trails – 5.3 miles groomed

Wildlife/Fish Management

Habitat Trails – 33.22 miles

Improved Wildlife Openings – 22

Boat Landings – 11

Improved Fishing Sites – 5

1 VILAS COUNTY FORESTRY PLAN, PURSUANT TO §28.11, WIS. STATS.

2

3

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CHAPTER 2000

6

7

ANNUAL PLANNING

8

9

10 2000 **OBJECTIVE & POLICY.....2**

11

12 2100 **ANNUAL WORK PLAN & BUDGET.....2**

13

14 **2000 OBJECTIVE & POLICY**

15
16 OBJECTIVE

17
18 To develop an annual work plan and budget that will satisfy the needs specified in
19 Chapter 1000 to the greatest extent feasible, consistent with program priorities
20 established in the Mission Statement.

21
22 POLICY

23 The County Forest Program will sustain a level of operation that considers the
24 needs of the forest and the public in accordance with the goals identified in
25 Chapter 100.

26
27 **2100 ANNUAL WORK PLAN & BUDGET**

28
29 Each year an Annual Work Plan & Budget shall be prepared by the forest
30 administrator with assistance from the Committee and the DNR liaison forester.
31 This plan shall be based upon the detailed annual needs contained in Section 1100
32 of the Plan. Annual work plans are approved by the County Board and forwarded
33 to the DNR as required by Wisconsin Statutes §28.11(5)(b) and §28.11(5m)(b).
34 Following County Board approval, a copy is provided to official copy-holders of
35 the Vilas County Forestry Plan for inclusion as an amendment in this chapter.

2006 Work Plan
Vilas County Forest Administrators Grant
Forest Acres: 40,860.48

TIMBER MANAGEMENT

- ☐ Conduct spring 2006 timber sale from establishment schedule of 925 acres.
- ☐ Continue annual goal of updating the Forest Reconnaissance of 2,000 acres per year.
- ☐ Prepare for 2007 timber sales scheduled harvest of 535 acres (does not include Cedar).
- ☐ Contract for hand planting 76 acres.
- ☐ Contract for chemical release and chemical site preparation of approximately 136 acres.
- ☐ Supervise County site preparation by bracke scarifier 180 acres for 2007 planting.
- ☐ Contract for mechanical release of 60 acres.
- ☐ Contract for pruning approximately 30 acres of White Pine pole stands.
- ☐ Contract for bud capping 235 acres (second year).
- ☐ Gain efficiency in use of County Forest GIS, RAVE, & GPS Unit.
- ☐ Timber Sale Contract Administration of 20 contracts including the scaling and billing of all wood products and documentation of all contract activity.
- ☐ Supervise and assist in the surveys of plantation survival; approximately 600 acres.
- ☐ Coordinate with DNR Liaison for assistance and specialist assistance; i.e., insect and disease, timber sale establishment, etc.
- ☐ Supervise the documentation, sales, and permitting for fuelwood, boughs, birch tops, camping, maps, air photos, and Christmas trees.
- ☐ Administrate the issuing and documenting of access permits to private lands over County Forest Lands.
- ☐ Determine the requirements and arrange for the twice a year grading and patch gravel needs through the Vilas County Highway Department over the 47.45 mile County Forest Road System. Apply approximately 2,500 cubic yards of gravel to County Forest Roads.
- ☐ Begin development of new County Forest Road - >Rangeline Lake=, approximately .7 miles.
- ☐ Continue the scheduled maintenance of CFL Boundary established by Certified Survey and contract for Certified Survey of boundary lines necessary for timber sale establishment.
- ☐ Administer the Certification of the Forest under the standards of SFI.

RECORDS

- ☐ Maintain operations records for: Forestry, Recreation, Budget, Lands, Access, Snowmobile Trail Program, & Fish & Wildlife Conservation Projects.

FORESTRY, RECREATION, & LAND COMMITTEE MEETINGS

95

- 96 ☐ Create the agenda for monthly meetings.
- 97 ☐ Inform the Committee on Department activities, distribute information &
- 98 correspondence, and prepare resolutions.
- 99 ☐ Record and maintain minutes.

100

101 RECREATION

102

- 103 ☐ Supervise and assist in the improvement and maintenance of:
- 104 ☐ 17 picnic areas with 4 beaches.
- 105 ☐ 18 boat landings.
- 106 ☐ 14 piers.
- 107 ☐ 1 shooting range.
- 108 ☐ 6 camping sites.
- 109 ☐ Cranberry Island Recreation Site.
- 110 ☐ Access road improvement & hunting sites at VCF Disabled Hunter Area.
- 111 ☐ Eagle Lake and Tamarack Flowage boat landings improvement projects.
- 112 ☐ Eagle Lake Park: Beach retaining wall replacement (by contract).
- 113 ☐ ATV trails: Apply for funding and contract for maintenance of ATV trails per
- 114 County Board Resolution 2004-101.
- 115 ☐ Coordinate & assist bicycle clubs and Townships for the creation of bike trails
- 116 throughout Vilas County.

117

118 SNOWMOBILE TRAIL PROGRAM

119

- 120 ☐ Supervise and assist the Snowmobile Trail Program Coordinator with:
- 121 ☐ Contracts for Funded Trail Maintenance - 445.7 miles.
- 122 ☐ Contract administration and inspection.
- 123 ☐ Records and disbursements.
- 124 ☐ Trail re-routes and rehabilitation projects: Walt's Fire Lane culvert; Mud Creek
- 125 Bridge & Arbor Vitae re-route & bridge.

126

127 WILDLIFE CONSERVATION

128

- 129 ☐ Supervise and plan the maintenance and improvements of:
- 130 ☐ 1/3 of the Habitat/Hiking Trail System, approximately 30 miles of mowing with
- 131 discing and seeding as needed. Signs & parking lots of complete trail system.
- 132 ☐ 37 Constructed Wildlife Openings will receive mowing with 4 of the openings to
- 133 receive discing of sludge and re-seeding
- 134 ☐ Continue partnership with City of Eagle River for the application of treated sludge
- 135 to 28 openings.
- 136 ☐ Gate and berm maintenance.
- 137 ☐ Contract the maintenance of 25 - 33% of the identified natural openings greater
- 138 than 1 acre.
- 139 ☐ Establish/enhance wild rice in Mickey's Mud Lake by planting 200 lbs. of wild

- 140 rice.
141 ☐ Contract for shearing of alder for woodcock/grouse habitat.
142 ☐ Coordinate effort to renovate road crossing culvert on Tamarack Road to improve
143 trout habitat.
144

145 TAX DEED PARCELS

- 146
147 ☐ Administrate the disposition of lands acquired by Vilas County through tax
148 delinquency.
149 ☐ Locate parcels and mark boundaries for public to be able to locate.
150 ☐ Contract for environmental assessments.
151 ☐ Contract for formal appraisals.
152 ☐ Prepare for public sale by sealed bids.
153 ☐ Maintain records and transfer of ownership.
154

155 LAND

- 156
157 ☐ Administrate access requests, access permits, resolve boundary disputes, and
158 encroachments.
159 ☐ Survey of Forest Boundary per budget/timber sales needs.
160 ☐ Continue with the maintenance of boundary lines established by certified survey.
161 The third round of line maintenance will be accomplished. Current need is to re-
162 establish portions of line that has been destroyed and locate/perpetuate corners
163 and BT=s.
164 ☐ Continue the process of acquiring BLM land at Pickerel Creek to be added to
165 Vilas County Forest.
166 ☐ Acquisition of 40-80 acres in Township of Conover to block County Forest
167 (pending land trade).
168 ☐ Acquisition of 40 acres from WDNR at Baker Lake.
169

170 CONTINUING EDUCATION/WISCONSIN COUNTY FORESTS ASSOCIATION

- 171
172 ☐ Maintain involvement and support of WCFA.
173 ☐ Continue participation on the WCFA Legislative & Forest Certification
174 Committees.
175 ☐ Continue involvement with Trees for Tomorrow.
176 ☐ Attend seminars on current knowledge and application of forest science through
177 Society of American Foresters, WDNR, etc.
178 ☐ Attend safety and personnel workshops by Vilas County.
179 ☐ Continue membership in the Society of American Foresters and the Certified
180 Forester Program.
181

182 STAFF

- 183
184 ☐ Supervise staff of:

- 185 # Assistant Forest Administrator.
186 # Administrative Secretary A.
187 # Forest Technician.
188 # Parks/Snowmobile Trail Program Technician.
189 ☐ Process the hiring of 2 Parks/Conservation Interns and 1 Forestry Intern and
190 oversee their itinerary.
191 ☐ Arrange with the Sheriff's Department for part-time deputy to enforce the Forest
192 and Parks Ordinances - 25 man days.
193
194 ☐ PREPARE and SUMMARIZE DEPARTMENT BUDGET MONTHLY AND
195 THE 2007 BUDGET
196
197 ☐ PREPARE THE DEPARTMENT ANNUAL REPORT OF OPERATIONS
198
199 ☐ CONDUCT ANNUAL PLANNING MEETING WITH DNR LIASON
200 FORESTER, WILDLIFE BIOLOGIST, & SUB-TEAM LEADER
201
202 ☐ MAINTENANCE OF BUILDINGS, EQUIPMENT, & FACILITIES
203 # Prepare annual inventory.
204 # Cleaning and maintenance of Department Headquarters.
205 # Determine needs for maintenance of equipment, tools, etc.
206 # Initiate major needs to be budgeted with Forestry and Public Property
207 Committees.

208 Submitted by:
209
210
211
212

213 Steve Doyen, Chair
214 Vilas Co. Forestry, Recreation, & Land Committee
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233
234 **2007 Work Plan**
235 **Vilas County Forest Administrators Grant**
236 **Forest Acres: 40,845.48**
237
238

239 **TIMBER MANAGEMENT**
240

- 241 ☐ Complete the 15 Year Forest Management Plan
- 242 ☐ Conduct spring 2007 timber sale from establishment schedule of 894 acres.
- 243 ☐ Continue the updating the Forest Reconnaissance, 5,000 acres per year for the
244 next 3 years.
- 245 ☐ Prepare for 2008 timber sales from the scheduled harvest of 784 acres. (Does not
246 include Cedar).
- 247 ☐ Contract for hand planting 153 acres.
- 248 ☐ Contract for chemical release and chemical site preparation of approximately 105
249 acres.
- 250 ☐ Supervise County site preparation by bracke scarifier 180 acres for 2008 planting.
- 251 ☐ Contract for mechanical release of 60 acres.
- 252 ☐ Contract for pruning approximately 15 acres of White Pine pole stands.
- 253 ☐ Contract for bud capping 75 acres.
- 254 ☐ Update the software of the County Forest Geographical Information System,
255 including a mini-server.
- 256 ☐ Oversee and participate in Timber Sale Contract Administration of 20 contracts
257 including the scaling and billing of all wood products and documentation of all
258 contract activity.
- 259 ☐ Supervise and assist in the surveys of plantation survival; approximately 600
260 acres.
- 261 ☐ Coordinate with DNR Liaison for assistance and specialist assistance; i.e., insect
262 and disease surveys, timber sale establishment, etc.
- 263 ☐ Supervise the documentation, sales, and permitting for fuelwood, boughs,
264 camping, maps, air photos, and Christmas trees.
- 265 ☐ Administrate the issuing and documenting of access permits to private lands over
266 County Forest Lands.
- 267 ☐ Determine the requirements and arrange for grading (2X/year) and patch gravel
268 needs through the Vilas County Highway Department (or by contract) for the 47.7
269 mile County Forest Road System. Coordinate with the County Highway Dept. for
270 the crushing of gravel.
- 271 ☐ Begin development of new County Forest Road - >Rangeline Lake=,
272 approximately .7 miles. Apply for assistance from the Wisc. National Guard.
- 273 ☐ Continue the scheduled maintenance of County Forest boundary established by
274 Certified Survey and contract for Certified Survey of boundary lines necessary for
275 timber sale establishment.

276 ☐ Administer the Certification of the Forest under the standards of SFI.

277

278 RECORDS

279

280 ☐ Maintain operations records for: Forestry, Recreation, Budget, Lands, Access,
281 Snowmobile Trail Program, ATV Trails Program, & Fish & Wildlife
282 Conservation Projects.

283

284 FORESTRY, RECREATION, & LAND COMMITTEE MEETINGS

285

286 ☐ Create the agenda for monthly meetings.

287 ☐ Inform the Committee on Department activities, distribute information &
288 correspondence, and prepare resolutions.

289 ☐ Record and maintain minutes.

290

291 RECREATION

292

293 ☐ Supervise and assist in the improvement and maintenance of:

294 ☐ 15 picnic areas with 3 beaches.

295 ☐ 11 boat landings.

296 ☐ 13 piers.

297 ☐ 1 shooting range.

298 ☐ 8 camping sites.

299 ☐ Cranberry Island Recreation Site.

300 ☐ Access road improvement & hunting sites at VCF Disabled Hunter Area.

301 ☐ Baker L. or Pickerel Creek boat landings improvement projects.

302 ☐ ATV trails: Apply for funding and contract for maintenance and development of
303 ATV trails per County Board Resolution 2004-101.

304 ☐ Coordinate & assist bicycle clubs and Townships for the creation of bike trails
305 throughout Vilas County.

306

307 SNOWMOBILE TRAIL PROGRAM

308

309 ☐ Supervise and assist the Snowmobile Trail Program Coordinator with:

310 # Contracts for Funded Trail Maintenance - 445.7 miles.

311 # Contract administration and inspection.

312 # Records and disbursements.

313 # Trail re-routes and rehabilitation projects: Otter Rapids Dam/Bridge
314 Pincherry Road Culvert.

315

316 WILDLIFE CONSERVATION

317

318 ☐ Supervise and plan the maintenance and improvements of:

319 ☐ 1/3 of the Habitat/Hiking Trail System, approximately 30 miles of mowing with
320 disking and seeding as needed. Signs & parking lots of complete trail system.

- 321 ☐ 19 Constructed Wildlife Openings will receive mowing with 4 of the openings to
- 322 receive disking of sludge and re-seeding
- 323 ☐ Continue partnership with City of Eagle River for the application of treated sludge
- 324 to 28 openings.
- 325 ☐ Gate and berm maintenance.
- 326 ☐ Contract the maintenance of 25 - 33% of the identified natural openings greater
- 327 than 1 acre.
- 328 ☐ Establish/enhance wild rice in Mickey's Mud Lake or another suitable site as
- 329 identified by Wildlife Biologists, by planting 200 lbs. of wild rice.
- 330 ☐ Identify areas suitable for shearing of alder for woodcock/grouse habitat and
- 331 contract for the work to be accomplished.
- 332 ☐ Coordinate with WDNR Fisheries for the removal of the logging dam sill at the
- 333 Tamarack Creek Campground and Picnic Area to improve trout habitat on
- 334 Tamarack Creek.
- 335

336 TAX DEED PARCELS

337

- 338 ☐ Administrate the disposition of lands acquired by Vilas County through tax
- 339 delinquency.
- 340 # Locate parcels and mark for the public to be able to locate.
- 341 # Contract for environmental assessments.
- 342 # Contract for formal appraisals.
- 343 # Prepare for public sale by sealed bids.
- 344 # Maintain records and transfer of ownership.
- 345

346 LAND

347

- 348 ☐ Administrate access requests, access permits, resolve boundary disputes, and
- 349 encroachments.
- 350 ☐ Coordinate with WDNR and private landowners the resolution of the mismeander
- 351 of Pincherry L.
- 352 ☐ Survey of Forest Boundary per budget/timber sales needs.
- 353 ☐ Continue with the maintenance of boundary lines established by certified survey.
- 354 The third round of line maintenance will be accomplished. Current need is to re-
- 355 establish portions of line that has been destroyed and locate/perpetuate corners
- 356 and bearing trees.
- 357 ☐ Continue the process of acquiring BLM land originating from the mismeander of
- 358 Pickerel Lake and enter in the County Forest Law.
- 359 ☐ Acquisition of 40 acres in Township of Conover to block County Forest (pending
- 360 land trade).
- 361 ☐ Acquisition of 40 acres from WDNR at Baker Lake.
- 362

363 CONTINUING EDUCATION/WISCONSIN COUNTY FORESTS ASSOCIATION

364

- 365 ☐ Maintain involvement and support of WCFA.

- 366 ☐ Serve as Chair of County Foresters' Association representing WCFA in
367 legislative initiatives, partner organizations, and serving on WCFA Committees as
368 needed.
- 369 ☐ Continue participation on the WCFA Legislative & Forest Certification
370 Committees.
- 371 ☐ Continue involvement with Trees for Tomorrow.
- 372 ☐ Attend seminars on current knowledge and application of forest science through
373 Society of American Foresters, WDNR, etc.
- 374 ☐ Attend safety and personnel workshops offered by Vilas County.
- 375 ☐ Continue membership in the Society of American Foresters and the Certified
376 Forester Program.

377

378 STAFF

379

- 380 ☐ Supervise staff of:
- 381 # Assistant Forest Administrator.
- 382 # Administrative Secretary A.
- 383 # Forest Technician.
- 384 # Parks/Snowmobile Trail Program Technician.
- 385 ☐ Process the hiring of 2 Parks/Conservation Interns and 1 Forestry Intern and
386 oversee their itinerary.
- 387 ☐ Arrange with the Sheriff's Department for a deputy to enforce the Forest and
388 Parks Ordinances - 6 man days.

389

390 PREPARE THE DEPARTMENT MONTHLY BUDGET SUMMARY.

391

392 PREPARE THE 2008 BUDGET

393

394 PREPARE THE DEPARTMENT "ANNUAL REPORT OF OPERATIONS".

395

396 CONDUCT ANNUAL PLANNING MEETING WITH DNR LIASON FORESTER,
397 WILDLIFE BIOLOGIST, & SUB-TEAM LEADER

398

399 MAINTENANCE OF BUILDINGS, EQUIPMENT, & FACILITIES

- 400 # Prepare annual inventory.
- 401 # Cleaning and maintenance of Department Headquarters.
- 402 # Determine needs for maintenance of equipment, tools, etc.
- 403 # Initiate major needs to be budgeted with Forestry and Public Property
404 Committees.

405

406

407 Submitted by:

408

409

410

Steve Doyen, Chair
Vilas Co. Forestry, Recreation, & Land Committee

FORESTRY, RECREATION & LAND BUDGET SUMMARY

Parks: 100.55200	2006 Budget	2007 Budget
.135 Summer Help	8,240.00	8,490.00
.221 Telephone	400.00	400.00
.239 Refuse Removal	580.00	580.00
.242 Rec. Site Maintenance	8,500.00	8,500.00
.243 Boat Landings	3,000.00	3,000.00
.302 Equipment Acquisition & Maintenance	5,200.00	5,200.00
.330 Travel Expense	250.00	250.00
.810 Capital Equipment	-0-	-0-
.820 Capital Improvements	14,000.00	5,000.00
Forestry: 100.56103	2006 Budget	2007 Budget
.131 Summer Intern	3,399.00	3,510.00
.221 Telephone	1,700.00	1,600.00
.239 Refuse Removal	570.00	570.00
.296 Timber Stand Improvement	20,000.00	20,000.00
.297 Surveys	5,000.00	5,000.00
.302 Equipment Acquisition & Maintenance	9,400.00	9,400.00
.310 Supplies	3,700.00	3,700.00
.311 Postage	850.00	800.00
.312 Photocopier	550.00	550.00

.323 Publishing Fees	800.00	800.00
.330 Meetings & Seminars	1,000.00	1,000.00
. 799 County Forest Roads	8,000.00	8,000.00
.810 Capital Equipment	-0-	24,000.00
Conservation: 100.56104	2006 Budget	2007 Budget
.131 Summer Help	2,652.25	2,740.00
.137 Conservation Congress	1,200.00	1,200.00
.138 County Forest Patrol	2,600.00	1,500.00
.247 Game Trail Maintenance	3,000.00	2,000.00
.248 Panfishing Piers	1,500.00	1,500.00
.302 Equip Acquisition & Maintenance	2,500.00	2,500.00
.310 Supplies	500.00	500.00
.312 Photocopier	50.00	50.00
.588 Beaver Control	200.00	200.00
Snowmobile Program: 210.55441	2006 Budget	2007 Budget
.221 Telephone	150.00	200.00
.228 Trail Signs/Posts	11,000.00	11,000.00
.302 Equip Acquisition Maintenance	1,500.00	1,500.00
.310 Supplies	700.00	700.00
.311 Postage	50.00	75.00
.312 Photocopier	50.00	50.00
.405 Trail Maintenance	100,425.00	100,600.00
.406 Supplemental Maintenance	222,850.00	223,200.00
.810 Capital Equipment	-0-	-0-
.820 Snowmobile Trail Development	146,200.00	220,000.00
Non-Lapsing Accounts	1st of Year 2006	1st of Year 2007
State Forest Aid 220.56102	39,034.87	39,414.08

Fish & Game 100.56105	5,917.09	5,917.09
Co. Road State Aid 100.56106	3,315.64	5,593.87
Wildlife Habitat 100.56113	4,929.46	4,729.55
Outside Revenue 100.56130	8,402.91	8,364.05
Segregated Land 250.51560	190,381.81	187,638.25

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VILAS COUNTY FORESTRY PLAN

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CHAPTER 3000

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33 **3000 OBJECTIVE AND POLICY**

34 OBJECTIVE

35 To provide a quantifiable means of evaluating progress on both short and long
36 term goals on the Vilas County Forest.

37
38 POLICY

39 Annual accomplishments will be recorded as a historical record, to assist in future
40 planning, and to provide documentation for both the County, and the County
41 Forest system. This information is invaluable in addressing public, County
42 Board, and other legislative inquiries on the operation of the Forest as well as
43 assessing progress on goals.

44
45 **3100 ANNUAL ACCOMPLISHMENT REPORTS**

46 A copy of an annual accomplishment report shall be prepared and provided to
47 members of the County Board and to official copyholders of this Plan for
48 inclusion into this chapter.

49
50 This report shall include, at a minimum, the following:

- 51 1. Timber sale accomplishments including gross and net sale receipts
52 and harvest goals achieved.
- 53 2. Timber stand improvements accomplishments.
- 54 3. Recreation development and maintenance accomplishments
55 including recreation revenues and expenses.
- 56 4. Wildlife management accomplishments including revenues and
57 expenses.
- 58 5. Fisheries management accomplishments including revenues and
59 expenses.
- 60 6. Other accomplishments identified as “needs” in Chapter 1000.

3200 PAST ACCOMPLISHMENTS

This summary of the Forest activities should provide a running history of accomplishments by activity. It will provide a quick and accessible reference for accomplishments on the County Forest.

Examples of activities to track include timber sales, reforestation, timber stand improvement, recreational developments and wildlife habitat accomplishments.

3210 TIMBER SALES

Year	# of Sales	Sawtimber MBF	Pulpwood Cords	Acres Cut	Total Cord Equivalents	Sales Value
2005	15	346	9,646	464	10,482	\$319,369.94
2004	10	327	5,500	376	6,287	\$278,389.62
2003	19	512	8,597	626	9,831	\$463,002.63
2002	8	81	3,658	349	3,847	\$ 98,357.94
2001	11	422	10,628	743	11,629	\$410,151.18
2000	13	500	13,145	591	14,352	\$348,471.55
1999	15	288	13,830	787	14,442	\$581,652.09
1998	13	84	7,630	729	7,829	\$163,637.47
1997	33	106	44,687	1,907	44,932	\$1,550,060.87
1996	10	35	7,959	281	8,040	\$238,848.02
1995	15	137	13,412	724	13,733	\$257,896.67
1994	25	369	23,622	1,235	24,511	\$446,845.14
1993	21	418	19,700	1,091	20,706	\$335,136.09
1992	19	634	17,305	869	18,848	\$217,930.44
1991	23	472	12,474	717	13,626	\$170,442.47
1990	26	530	14,429	829	14,647	\$163,974.58
1989	22	488	12,653	696	13,844	\$160,704.16
1988	21	701	14,370	962	16,077	\$190,825.08
1987	19	890	21,637	973	23,711	\$236,717.22
1986	14	510	13,160	758	14,404	\$137,676.03
1985	21	589	15,349	941	16,713	\$171,508.72
1984	20	708	20,622	1,344	22,350	\$203,878.00
1983	22	548	25,265	1,412	26,602	\$267,139.00
1982	20	794	27,759	1,533	29,693	\$290,372.00
1981	19	502	10,789	955	12,014	\$104,306.13
1980	28	411	23,664	1,722	24,665	\$159,730.63

3220 REFORESTATION

The Vilas County Forest was established in 1933 with the entry of lands under the County Forest Law. In the early years the establishment of forest stands by planting and direct seeding was done on lands understocked or devoid of trees due to severe wildfires and failed farms. Beginning in the 1970's to the present day, planting and seeding have taken place to insure the regeneration of fully stocked

stands after harvest and to convert harvested stands of White Birch, Red Maple, and Scrub Oak to more productive Pine, Spruce, and Tamarack.

Since the inception of the County Forest in 1933, 8,666 acres of forest stands have been established with the cooperation of the Wisconsin State Nurseries supplying seeds and seedlings. Seedlings have been planted on 8,409 acres and 257 acres have been direct seeded.

The following tables are an overview of the 73 year planting and seeding effort, illustrating the endeavor to create more natural appearing stands of mixed species in more recent years. The species symbols in the table are as follows: Pj = Jack Pine; Pr = Red Pine; Pw = White Pine; Sb = Black Spruce; Sw = White Spruce; T = Tamarack; H = Hemlock; Bw = White Birch; Or = Red Oak.

Reforestation – Planting

Year	Acres	Trees Planted (in thousands)	Total Trees Planted (in thousands)
2006	78	Pj 51; Pr 3; Pw 3; Sw 2; T 2	61
2005	208	Pj 111; Pr 37; Pw 17; Sb 1; Sw 9; T 9; Bw 2	186
2004	304	Pj 221; Pr 4; Sw 4; T 2	231
2003	265	Pj 182	182
2002	237	Pj 146; Pr 5; Pw 24; Sb 2; Sw 25; T 8; Or 5	215
2001	221	Pj 125; Pr 4; Pw 4; Sw 4; T 4; H 4	145
2000	214	Pj 118; Sw 2; T 4	124
1999	145	Pj 3; Pr 23; Pw 31; Sb 8; Sw 62	127
1998	212	Pj 4; Pw 97; Sb 20; Sw 70; T 43; H 1; Bw 5	240
1997	307	Pj 72; Pr 23; Pw 47; Sb 47; Sw 55; T 10; Bw 1	255
1996	182	Pj 11; Pr 34; Pw 52; Sw 20; T 7; H3	127
1995	230	Pj 97; Pr 38; Pw 38; Sw 12; T10	195

1994	173	Pj 96; Pr 41; Pw 1; Sw 13	151
1993	152	Pj 20; Pr 95; Pw 10; Sw 16	141
1992	265	Pj 106; Pr 113; Sw 14	233
1991	145	Pj 36; Pr 91	127
1990	242	Pj 111; Pr 80	191
1989	179	Pj 110; Pr 34	144
1988	160	Pj 30; Pr 103; Or 12	145
1987	152	Pj 9; Pr 135	144
1986	224	Pj 168; A 4; Or 3	175
1985	232	Pj 219; A 9; Or 6	234
1984	304	Pj 34; Pr 231	265
1983	148	Pr 126	126
1982	143	Pr 113	113
1981	116	Pr 77; Sw 10	87
1980	66	Pj 13; Pr 46	59
Totals	5,304		4,423

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1933 – 1979 3,105 acres were planted.

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Reforestation – Direct Seeding

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Year	Acres	Species
2005	5	Bw
2004	27	Pr; Pw; Sw; T
1986	81	Pj
1985	51	Pj
1984	9	Pj
1982	7	Pj
Totals	180	

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1933 – 1979 77 acres were seeded.

103 3230 TIMBER STAND IMPROVEMENT

Year	Release & Pre-Commercial Thinning (Acres)		Pruning (Acres)	Deer Damage Control (Acres)	
	Mechanical	Chemical		Budcap	Repellant
2005	111			239	7
2004	67		132	214	
2003					
2002		29	35		
2001	220	33	158		
2000	513	187			
1999	149	195			
1998	155				
1997	158	89			
1996		90	6		
1995		62			
1994	45	86			
1993	34	213			
1992	45	114	6		
1991	101	144	19		
1990		43			
1989	56	327	7		
1988	137		29		
1987	19		19		
1986	56		42		
1985	58	58	41		
1984	21	200	45		
1983	67	145	34		
1982	125	106	46		
1981	682		131		
1980	1,238		36		

Note:

- All figures are in acres.
- Since 1982 the release of Aspen sprouts from overtopping vegetation has been made a part of the timber sale contracts.
- Prior to 1980:
 - Release & Pre-Commercial Thinning totaled 413 acres.
 - Pruning totaled 95 acres.
 - Insect Protection totaled 6,087 acres.

3240 RECREATIONAL DEVELOPMENTS

Year	Site Name/Type	Maintain	Develop	Improve
2005	All sites	X		
	Shooting Range	X	ADA shooting tables 50', 100' Topsoil, seeding: rifle & pistol ranges, clay bird range table	X
	ATV trail		Land O'Lakes Trail (.4 mile; not County-owned lands)	
	Lake of the Hills, Eagle Lake, Boot Lake Boat Landings	X		X
2004	All sites	X		
	Shooting Range	X	Relocate trap shooting area constructing 3 berms & 1 backstop, improve backstops at 25, 50, & 100 yd. Ranges, relocate pistol range, install 2 new shooting benches	
	ATV trails		County Board Resolution passed (2004-25) prohibiting ATV trails on County Lands. Department authorized to sponsor ATV trails on non-County owned lands.	
2003	All sites	X		
	Haymeadow Creek Snowmobile bridge		Replacement	
	Manitowish River – Boulder Junction		New bridge structure	

	Snowmobile bridge			
2002	All sites	X		
	River Road canoe landing, McLeod Lake, Dr. Oldfield Memorial Park, Snipe Lake, Lake of the Hills Boat Landings	X	Boat launch pads	X
	Lost Creek (St. Germain) & unnamed creek (Conover) Snowmobile Bridge		New bridges	
2001	All sites	X		
	Buckatabon Lake Boat Landing	X	Resurface landing & make parking & picnic areas ADA, replace privy, replace boat ramps	X
	Dr. Oldfield Memorial Park	X	Resurface parking lot, make picnic area & new privy ADA.	X
	Tamarack Creek & Chewelah Creek Snowmobile Bridges		New bridges	
2000	All sites	X		
	Lac Vieux Desert Park	X	Replace and make ADA pedestrian bridge	
	Boot Creek, Plum Creek, Eagle River Snowmobile Bridges		Replace bridges	
	Mud Minnow fishing pier		Renovation	X
1999	All sites	X		
	Papoose Creek Snowmobile Trail Culvert		New	
1998	All sites	X		
	Dr. Oldfield Memorial Park	X	Tree removal, memorial stonework repair, lawn improvement, install guard rail	X
	Shooting Range	X		X
	Mill Creek & Wisconsin River & Spider Lake Snowmobile Bridges; Snowmobile Trail Culverts at Illa Creek &		New bridges	

	Unnamed Stream (Presque Isle) Culverts			
1997	All sites	X		
	Wood Duck Lake fishing pier		Replaced pier	X
	Lac Vieux Desert Park	X	ADA crushed granite walkway	X
	Deep Lake/Buckatabon Shelter off-road bike trail		Used existing forest roads & trails	
1996	All sites	X		
	South Branch Presque Isle River & Wisconsin River Snowmobile Bridges		New bridges	
	Cook's :Lake fishing pier		Replacement/ADA	
	Tamarack Springs Campground	X	Install self-pay registration station; steps & improved canoe landing	X
	Langley Lake Ski Trail	X	New signs installed	X
	Shooting Range	X	ADA pathway installed; berms improved	X
	Eagle Lake Park	X	Hazard trees & stumps removed; topsoil & grass seed.	X
1995	All sites	X		
	Wisconsin River (Rummels Rd.) & Stella Creek Snowmobile Bridges		New	
	Mishonagon Creek & Sugarbush Creek Snowmobile Bridges		Re-deck	X
1994	All sites	X		
	Crystal Creek Snowmobile Bridge		New	
	4 fishing piers		Renovations	X
	Cross-Country Ski System		Groomer fabricated	
	Phase I Eagle River Railroad Snowmobile Bridge		Phase I completed	X
1993	All sites	X		
	Trout River Snowmobile Bridge		Replacement	

	Tamarack Springs Campground	X	Brushing	X
1992	All sites	X		
	Lost Creek & Manitowish River Snowmobile Bridges		New	
1991	All sites	X		
1990	All sites	X		
1989	All sites	X		
1988	All sites	X		
	Verna Creek & Buckatabon Creek Snowmobile Bridges		New	
1987	All sites	X		
	Lac Vieux Park	X	Wood chip walkway installed	X
	Hunter Lake Park	X	Beach retaining wall	X
1986	All sites	X		
	Snipe Lake & Hunter Lake Parks	X	Shelters constructed	X
1985	All sites	X		
	Hunter/Hiking Trails	X	10.85 new miles constructed	
	Conover Self-Guided Auto Tour		New	
	Panfishing Piers	X	New construction	
	Buckatabon Creek Snowmobile Bridge		New	
	Tamarack Springs Campground/Picnic Area	X	Connecting Foot Bridge	X
	Pioneer Creek Canoe Landing		New	
	Cranberry Island Day Use Area	X	Renovation	
	McLeod Lake, Deep Lake, & Snyder Lake Parks	X	Reconditioned	X
1984	All sites	X		
	Hunter/Hiking Trails	X	Construct 9.95 new miles	
	Hunter Lake & Snipe Lake Day Use Parks		New	

	Torch Lake Park Tamarack Springs	X	Renovation & expansion	X
	Wood Duck & Ewald Lake fishing piers		New, with walkways	
	Shooting Range	X	Renovation	
1983	All sites	X		
	Hunter/Hiking Trails	X	Construct 14.2 new miles	
1982	All sites	X		
	Hunter/Hiking Trails	X	Develop 14.1 new miles	
	Fishing Piers	X	Construct 2 new piers	
	Torch Lake Park	X		X
1981	All Sites	X		X
	Multiple-Use Trail		New – 5.5 miles	
	Fishing Piers	X	Construct 2 new piers	
	Wisconsin River Canoe Campsites		4 sites	
1980	All sites	X		
	Multiple-Use Trail		Construct 4.5 miles	
	Fishing Piers		Construct 10 new piers/3 walkways	
	W. Buckatabon Creek & Military Creek Snowmobile Trail Culverts		New	

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117 3250 WILDLIFE PROJECTS

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2005	Wildlife Openings	X	Apply treated sludge, disk, seed annually since 1993	X
2004	Wildlife Openings	X		X
2003	Wildlife Openings	X		X
	Habitat Trails		Purchase brush mower & 6 gates for trails & openings.	
	Wild Rice		Planted 200 lbs – Muskrat Cr.	
2002	Wildlife Openings	X		X
2001	Wildlife Openings	X		X

2000	Wildlife Openings	X		X
1999	Wildlife Openings	X		X
1998	Wildlife Openings	X		X
1997	Citizen deer-feeding program		Assistance	
1996	Wildlife Openings	X	1,000 food/cover shrubs planted.	X
	Helicopter Landing		Expand, level, seed	X
	Citizen deer-feeding program		Assistance	
1995	Wildlife Openings	X		
1994	Wildlife Openings	X	Begin program of applying treated sludge, disking, seeding annually	
1993	Wildlife Openings	X		
1992	Wildlife Openings	X		
1991	Wildlife Openings	X		
1990	Wildlife Openings	X		
1989	Wildlife Openings	X		
1988	Wildlife Openings	X		
1987	Wildlife Openings	X		
1986	Wildlife Openings	X		
1985	Wildlife Openings	X		
1984	Wildlife Openings	X		
1983	Wildlife Openings	X		
1982	Wildlife Openings	X		
	Wild Rice planted			
1981	Wildlife Openings		10 Openings constructed	
1980	Wildlife Openings		23 Openings constructed	

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3300 MONITORING

3310 FOREST TYPES

The following table illustrates the composition of timber types and non-forest acreages on the Vilas County Forest at the time of the original reconnaissance in 1977, at the beginning of the 1995 Plan Period, the 2006 Present Composition, and the Projected Future Composition.

Forest Cover Type	1977 Acres	1995 Acres	2006 Acres	2015 Projected Acres
Aspen	13548	15308	14934	14869
Jack Pine	5847	6126	5485	5499
Red Pine	3213	3960	3965	3762
White Pine	-	878	1508	1925
Black Spruce	3475	2641	2785	2735
Oak	1202	2026	2220	1812
Northern Hardwoods	1625	1634	2235	2495
White Birch	2314	997	153	99
Tamarack	241	374	436	436
Swamp Conifer	330	183	173	173
Fir – Spruce	701	160	251	377
Cedar	35	40	60	60
Swamp Hardwoods	-	6	8	8
Hemlock–Hardwoods	10	-	7	7
Red Maple	-	-	52	15
Total Commercial Forested Land	32541	34333	34272	34272

Alder	1372	1421	1454	1454
Black Spruce	-	1053	1115	1115
Tamarack	-	284	312	312
Low Shrubs	452	310	302	302
Lowland Brush	-	227	187	187
Herbaceous Vegetation	116	125	164	164
Upland Brush	48	110	59	59
Upland Grass	-	12	-	-
Muskeg	-		1089	1089
Marsh	1652	-	13	13
Emergent Vegetation	-	-	67	67
Minor Lake	-	-	447	447
Minor Stream	-	-	228	228
Picnic Area	-	-	34	34
Right of Way			735	735
Snowmobile Trail			1	1
Industrial Area			7	7
Total Non-Commercial Forest	5026	3665	6214	6214
TOTAL COUNTY FOREST PROPERTY	37567	37998	40486	40486

During the current Plan Period, through 2020, no significant changes in the acreage of the major timber types are anticipated. However, a few of the changes are worthy of comment.

Red Oak is expected to decrease by about 400 acres. This decrease is due primarily to natural succession to Northern Hardwoods on the better sites and secondarily to White Pine by both natural succession and planting.

White Birch acreage decreased significantly during the period from 1995 through 2000 and is projected to decrease by 65% in the next 10-15 years. The White Birch

Timber Type on the Vilas County Forest became established in the early 1900's after the logging of the northern forests and the ensuing fires. Thus, the White Birch became mature and began to decline in the 1980's. The decline was exacerbated by the drought of the mid 1980's and an outbreak of the Birch Leaf miner followed by the Bronze Birch borer. As the White Birch was harvested most of the timber type was converted either naturally to Aspen and Oak-Red Maple or was planted to Red Pine, Jack Pine, or a mixture of Red Pine, White Pine, and White Spruce. Regeneration of White Birch was (and is still) hindered severely by deer. Also, stumpage prices for White Birch in the 1980's and 1990's did not warrant the expense of site preparation, planting, and fencing.

The remaining acres of White Birch will succeed to Fir-Spruce and/or Northern Hardwoods. With the WDNR Nurseries producing White Birch seedlings, consideration will be given to mix White Birch, in a small amount, in conifer plantings.

Updating of the Forest Reconnaissance will help identify more accurately the changing composition of the Forest and will result in some acreage changes over the years.

3320 HARVESTING

The table found in Chapter 1000 Section 1110 provides the annual harvest by timber type through the year 2016. The location by treatment type (e.g. thinning, regeneration, etc.) is provided in Chapter 900 page 900-78 on the map titled 'Vilas County Forest – 15 Year Plan – Harvest Treatments. It is important to note the scheduled acres for harvest may not necessarily result in a timber sale of a particular stand. If a scheduled stand is not ready for harvest or thinning it would be re-scheduled. Also, salvage due to insects, disease, or weather may result in substituting and re-adjusting harvest acreage.

3330 FLORA/FAUNA

Insect and disease problem arising during the previous planning period included forest tent caterpillar, two-lined chestnut borer, and spotty cases of sawfly damage. Mortality has occurred in both Aspen and Oak due to the forest tent caterpillar and the two-lined chestnut borer. Salvage sales have been established where feasible.

Occurrences of non-native invasive plant species have not been observed in significant numbers on the Forest. Staff will continue to monitor the situation of invasive species and make efforts to reduce their impacts should they be found. Since the re-introduction of the Timber Wolf in northern Wisconsin, the population has grown to approximately 400 animals. At least 2 packs have territories that lie partially on the Vilas County Forest.

High deer populations over the past several decades have caused difficulty in regenerating some forest tree species, namely Northern Hardwoods, White Birch, Hemlock, Pine, and Cedar. Since the 1960's when deer populations were estimated to be 400,000 animals statewide, the population has continued to increase. In 2004 the statewide deer population estimate was approximately 1.3 million animals. Despite these high deer populations, efforts to regenerate these tree species will continue.

3340 RECREATIONAL USE

The demand for recreational use of the forest has grown significantly over the past ten years. Growth in sports such as mountain biking, snowmobiling, snowshoeing, and cross-country skiing has resulted in the development of additional trail systems and mileage. Continued growth of these and other sports will result in the addition of more miles of trails and more facilities to accommodate the growth.

Other recreational uses of the forest including hunting, hiking, and fishing have remained fairly consistent over the past ten years. Growth in these types of uses of the County Forest may occur as large parcels of industrial forest are sold off. If this

land is taken out of the Managed Forest Law, or switched to ‘closed MFL’, public use may be shifted from these lands to the County Forest.

3350 HIGH CONSERVATION VALUE FOREST AREAS

Any new High Conservation Value Forest Areas will be added to the Plan as they are identified.

3360 ROADS AND ACCESS

One new County Forest Road was added in the past ten years. One new County Forest Road will be added during this Plan period, access to Rangeline Lake.

Access to the County Forest is addressed in detail in Chapter 700.